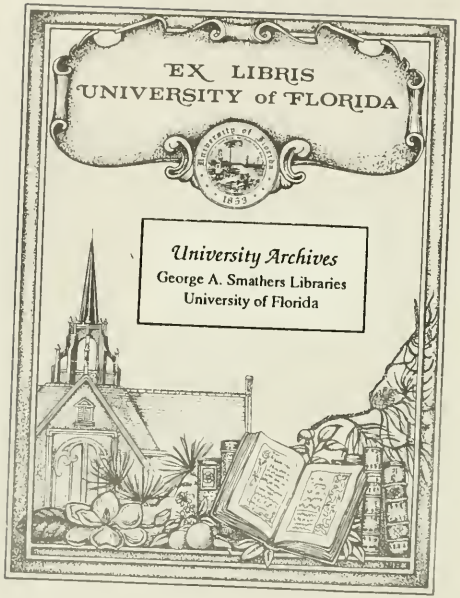
1984 — 1985

COLLEGE OF MEDICINE CATALOG
UNIVERSITY OF FLORIDA

THE UNIVERSITY RECORD

U378
FHU
V.74
SER.1
NO.3
MAY
1984


EX LIBRIS
UNIVERSITY of FLORIDA
University Archives
George A. Smathers Libraries
University of Florida

1984 — 1985
COLLEGE OF MEDICINE CATALOG

THE UNIVERSITY RECORD
J. HILLIS MILLER HEALTH CENTER
UNIVERSITY OF FLORIDA, GAINESVILLE

4378
FHu
v.79
Ser 1
no.3
May
1984

The University of Florida College of Medicine is an equal opportunity employer within the meaning of Title VII of the Civil Rights Act of 1964.

Volume LXXIX Series 1, No. 3, May 1984

THE UNIVERSITY RECORD (USPS 652-760) published quarterly by the University of Florida, Office of Publications, Gainesville, Florida 32611. Second-class postage paid at Gainesville, Florida 32601.

POSTMASTER: Send address change to the Office of the Registrar, University of Florida, Gainesville, FL 32611.

This publication has been adopted as a rule of the University pursuant to the provisions of Chapter 120 of the Florida Statute. Addenda to the University Record Series, if any, are available upon request to the Office of the Registrar.

STATE OF FLORIDA

Robert Graham
Governor

BOARD OF REGENTS

Hon. DuBose, Ausley
Tallahassee

Hon. J. Hyatt Brown
Daytona Beach

Hon. Cecilia Bryant-Godfrey
Jacksonville

Hon. Murray H. Dubbin
Miami

Hon. R. L. Gibson, Jr.
Chairman, Lake Wales

Hon. Raleigh W. Greene, Jr.
St. Petersburg

Hon. William F. Leonard
Fort Lauderdale

Hon. William L. Maloy
Pensacola

Hon. Barbara W. Newell, Ph.D.
Chancellor, State University System

Hon. Frank P. Scruggs
Miami

Hon. T. Terrell Sessums
Vice Chairman, Tampa

Hon. Betty Anne Staton
Orlando

Hon. Ralph D. Turlington
Tallahassee

Hon. Franklin Graham
Student Regent, Tallahassee

UNIVERSITY OF FLORIDA

Robert Q. Marston, M.D.
President

Louis V. Voyles, B.A.
Registrar

David R. Challoner, M.D.
Vice President for Health Affairs

William B. Deal, M.D.
Dean, College of Medicine
and Associate Vice President
for Clinical Affairs

MEDICAL ADVISORY COMMITTEE

James J. Borland, Jr., M.D.
Jacksonville

James W. Clower, Jr., M.D.
Daytona Beach

O. William Davenport, M.D.
Miami

Charles K. Donegan, M.D.
St. Petersburg

Richard M. Fleming, M.D.
Miami Beach

Francisco A. Herrero, M.D.
Daytona Beach

D. Orvin Jenkins, M.D.
Gainesville

Sam H. Moorer, Jr., M.D.
Tallahassee

Louis C. Murray, M.D.
Chairman/Orlando

Joseph C. Von Thron, M.D.
Cocoa Beach

John H. Whitcomb, M.D.
Pensacola

Robert E. Windom, M.D.
Sarasota

J. Hillis Miller Health Center and Veterans Administration Medical Center

ACADEMIC CALENDAR 1984 — 1985

Registration All Classes	Monday, August 20, 1984

PHASES A and B Holidays

Labor Day	Monday, September 3, 1984
Veterans Day	Monday, November 12, 1984
Thanksgiving	Wednesday, 6:30 p.m., November 21 to Monday, November 26, 1984

FIRST YEAR (Class of 1988)
Phase A

1st Semester

Orientation	Week of August 13, 1984
Classes Begin	Monday, August 20, 1984
Semester Ends	Friday, December 21, 1984

2nd Semester

Classes Begin	Monday, January 7, 1985
Semester Ends	Friday, May 24, 1985

SECOND YEAR (Class of 1987)
Phase B

1st Semester

Classes Begin	Monday, August 20, 1984
Semester Ends	Friday, December 21, 1984

2nd Semester

Classes Begin	Monday, January 7, 1985
Classes End	Friday, March 8, 1985
Clinical Rotations	Monday, March 18, 1985

THIRD YEAR (Class of 1986)
Phase B (continued)

Clinical Rotations End	Saturday, March 9, 1985

Phase C

(The academic calendar for Phase C is published in the Phase C catalog.)

Classes Begin	Monday, March 18, 1985

FOURTH YEAR (Class of 1985)
Phase C (continued)

Classes End	Friday, May 31, 1985
Commencement	Saturday, June 1, 1985

TABLE OF CONTENTS

8 Dean's Staff
10 Department Chairmen

13 **GENERAL CONSIDERATIONS**
13 Educational Concerns
14 Students
14 Faculty
14 Research
15 Facilities

19 **ACADEMIC CONSIDERATIONS**
19 The Continuum of Medical Education
19 The Art and Science of Medicine
20 Flexibility of Programs
22 Junior Honors Medical Program
23 Program in Medical Sciences (PIMS)
23 Jacksonville Health Education Programs, Inc. (JHEP)
24 Pensacola Educational Program, Inc. (PEP)
24 Community Medicine
25 Preprofessional Education
25 The Applicant Pool
25 Admission to the College of Medicine at an Advanced Standing Status
27 Basic Science Requirements
28 Medical College Admission Test
28 Application and Acceptance Procedures
31 Professional Education Leading to the M.D. Degree
31 Phase A
32 Phase B
32 Phase C
34 Evaluation
36 Student Conduct Code
38 Student Conduct Standards Committee
38 Academic Honesty Guidelines
39 Dress Code Policy
39 Graduate and Postgraduate Programs
39 Graduate Education in the Medical Sciences
39 Programs Leading to the Ph.D. and M.S. Degrees
40 Medical Scientist Training Program (Combined M.D.-Ph.D. Degree)
41 Graduate Medical Education (Residencies and Fellowships)
42 Licensure
42 Continuing Education

45 **STUDENT INFORMATION**
45 Financial Considerations
45 Scholarships
47 Scholastic Awards
50 Loan Funds
52 Fellowships
53 Living Accommodations

55 **COURSE DESCRIPTIONS**
55 Phase A
56 Phase B
57 Phase C
58 Graduate Courses in the Medical Sciences
61 Anatomy
62 Biochemistry and Molecular Biology
64 Immunology and Medical Microbiology
65 Neuroscience
68 Pathology
72 Pharmacology and Therapeutics
73 Physiology
75 Undergraduate Courses

79 **ACADEMIC PERSONNEL**
79 Faculty

107 **STUDENTS**
107 Medical Students
115 Graduate Students

DEAN'S STAFF

William B. Deal, M.D.
Dean, College of Medicine and
Associate Vice President for
Clinical Affairs

J. Lee Dockery, M.D.
Associate Dean

Hugh H. Hill, M.D.
Associate Dean for Student and
Alumni Affairs

Lamar Crevasse, M.D.
Assistant Dean for
Continuing Medical
Education

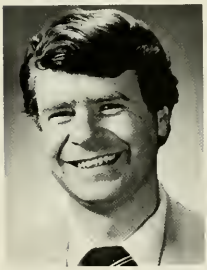
Charles P. Gibbs, M.D.
Assistant Dean for
Curriculum

Jamie L. Frias, M.D.
Chairman, Medical
Selection Committee

Joseph E. Lofton, M.D.
Assistant Dean for
Preprofessional Education

R. M. Whittington, M.D.
Assistant Dean for VA
Medical Center Relations

William C. Ruffin, M.D.
Assistant Dean for
Clinical Affairs



Robert H. Reeves, Ph.D.
Assistant Dean for
Tallahassee Program

Louis S. Russo, Jr., M.D.
Assistant Dean for
Jacksonville Program

Max Michael, Jr., M.D.
Assistant Vice President
for Health Affairs/JHEP

DEPARTMENT CHAIRMEN

Michael H. Ross, Ph.D.
Chairman, Anatomy

Jerome H. Modell, M.D.
Chairman, Anesthesiology

Thomas W. O'Brien, Ph.D.
Acting Chairman, Biochemistry and Molecular Biology

William L. Stewart, M.D.
Chairman, Community Health and Family Medicine

Kenneth I. Berns, M.D., Ph.D.
Chairman, Immunology and Medical Microbiology

James E. McGuigan, M.D.
Chairman, Medicine

Albert L. Rhoton, M.D.
Chairman, Neurological Surgery

Melvin Greer, M.D.
Chairman, Neurology

William G. Luttge, M.D.
Chairman, Neuroscience

Eduard G. Friedrich, M.D.
Chairman, Obstetrics and Gynecology

Melvin L. Rubin, M.D.
Chairman, Ophthalmology

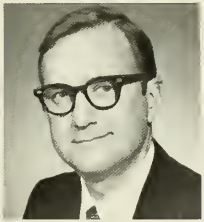
William R. Petty, M.D.
Chairman, Orthopaedic Surgery

Richard T. Smith, M.D.
Chairman, Pathology

Gerold L. Schiebler, M.D., Ph.D.
Chairman, Pediatrics

Allen H. Neims, M.D., Ph.D.
Chairman, Pharmacology and Therapeutics

M. Ian Phillips, Ph.D.
Chairman, Physiology



John E. Adams, M.D.
Chairman, Psychiatry

Clyde M. Williams, M.D., Ph.D.
Chairman, Radiology

Edward M. Copeland, III, M.D.
Chairman, Surgery

GENERAL CONSIDERATIONS

The College of Medicine, a component college of the J. Hillis Miller Health Center of the University of Florida, opened its doors to medical students in September, 1956. The various programs rapidly expanded to include a curriculum leading to the M.D. degree, a Ph.D. program in the basic medical sciences, and residency programs in the various specialties and subspecialties of medicine, and numerous special fellowship programs of clinical or scientific orientation.

The College of Medicine aspires to serve as an academic center of scientific and educational excellence and leadership in medicine and allied health fields, and to provide highly specialized medical care services to patients referred by practicing physicians. The faculty is dedicated to programs of education, research, and patient care, while providing the student educational experiences of the highest quality. Located in Northcentral Florida, the College of Medicine is engaged in intramural programs with the Gainesville Veterans Administration Medical Center and extramural programs involving neighboring communities as well as a network of educational services in Daytona Beach, Jacksonville, Tallahassee, Pensacola, Orlando, and other Florida cities.

Situated at the southeast corner of the 2000-acre campus of the University of Florida, the College of Medicine enjoys the benefit of strong ties with other programs within the university. The relationships to engineering, biological sciences, social sciences, education, psychology, and other disciplines are of particular importance.

EDUCATIONAL CONCERNS

The educational concerns of the College of Medicine begin with preprofessional counseling, and include the program leading to the M.D. degree, residency, and continuing medical education for the practicing physician. Each phase of this educational continuum has particular emphasis and significance.

Educational offerings for the student of medicine must draw on the humanities, natural and biological sciences, and on technology to provide a well-balanced educational experience. The graduates of the program must have an appreciation both for the breadth of the arts and skills of medicine and the highly specialized and fundamental nature of scientific medicine. The graduates of the M.D. degree program must have sufficient experience to be able to choose from the many career opportunities in medicine. Also, they must have acquired an attitude of continuing self-education and must have learned to adhere to the highest scientific and ethical standards of the medical profession.

The College of Medicine and its programs received full national accreditation first in 1960 and again in 1976 by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association. The residency programs are accredited individually by respective specialty boards.

STUDENTS

The college aspires to attract into the various programs students of the highest caliber. High standards of scholastic achievement, moral character, and motivation are required of the student. The highly personal relationship between patient and physician places the latter in a position of trust, which demands maturity, integrity, intellectual honesty, and a sense of responsibility. Because of the vast area of science which must be mastered by the physician, the student of medicine must possess a high basic aptitude supplemented by academic preparation of the highest order. Through an active recruitment program, a broader representation of the ethnic mixture of the state is sought in the student body. The college adheres strictly to the principle of ethnic, racial, religious, sex and social equality among its student body and faculty.

The University of Florida does not discriminate on the basis of handicap in the recruitment and admission of students, the recruitment and employment of faculty and staff, and the operation of any of its programs and activities, as specified by federal laws and regulations. The designated coordinator for university compliance with Section 504 of the Rehabilitation Act of 1973 is the Associate Dean for Student Affairs.

FACULTY

The student is accepted into a fellowship of learning that should mark the beginning of an educational and personal relationship of long duration. To meet the requirements of modern medical education, the faculty must be representative of a wide area of academic experience. In addition to the demand for highest competence in a chosen field of specialization, the faculty must be interested in education and in students. It must attempt to develop and maintain close faculty-student relationships through personal, professional, and social contacts. The nature of investigative and clinical training demands close interaction between faculty, students, and the problem at hand, be it the patient or the object of scientific study.

RESEARCH

Individual and cooperative investigations constitute an important aspect of the activities of faculty and students. Facilities and equipment are made available through state, private, and federal funds. In addition to the research laboratories and animal facilities in the J. Hillis Miller Health Center and the Veterans Administration Medical Center, there are animal research facilities at the Health Center Animal Research Farm.

Research projects of the faculty of the College of Medicine range from problems of molecular and cellular biology to all phases of basic and applied clinical investigations including behavioral sciences, epidemiology, and many other disciplines. Collaborative projects are in process with veterinary science, engineering, biology, nuclear sciences, psychology, sociology, education, and many other disciplines.

In view of the nature of modern biomedical investigation, it is natural that many interdepartmental efforts have evolved. Most of these involve faculties from the basic and clinical sciences, and frequently from other colleges in the university. In general, these groups are organized along categorical lines such as the Center for Neurobiological Sciences, the Cardiovascular Group, the Tumor Biology Group, the Divisions of Infectious Diseases, Genetics, Endocrinology and Metabolism, and Gastroenterology, to mention a few. These groups serve a specific research need for the faculty and comprise very strong educational units in the new curriculum. The Clinical Research Center in Shands Hospital is a focus for clinical investigation. Very active collaboration in both research and education is developing between faculties of the College of Medicine and the College of Engineering. Educational opportunities in biomedical engineering are available at all levels: pre-bachelor, graduate, and postgraduate.

FACILITIES

Most programs and faculty are housed in the J. Hillis Miller Health Center. The Health Center's facilities include the Chandler A. Stetson Medical Sciences Hall, the Communicore Building, the Colleges of Dentistry, Health Related Professions, Medicine, Nursing, Pharmacy, Veterinary Medicine, Shands Hospital, and the Gainesville VA Medical Center.

The 476 bed Shands Hospital has some 18,000 inpatient admissions recorded each year. The outpatient clinics and services record over 200,000 visits per year. The VA Medical Center, located across the street from the Health Center, has a capacity of 475 beds and provides additional clinical and research sources. Both institutions offer ample opportunity for hospital-based bedside and ambulatory teaching. Formal educational affiliations have been established in Tallahassee, Pensacola, and Jacksonville as well, thus providing additional basic science and clinical science resources.

The Communicore is a facility unique to the College of Medicine. This building houses lecture and seminar rooms, multidisciplinary teaching laboratories designed to be flexible enough to accommodate the wide variety of laboratory teaching programs of the different disciplines, study areas, and a center for development and utilization of audiovisual and automated learning aids. In addition, the Health Center Library has a collection of over 193,000 books and periodicals. Computer-based bibliographic retrieval services, such as MEDLINE, are available to support teaching and research activities. The library participates in a regional network of medical libraries to supplement its information resources.

The new and modern Shands Patient Services Building scheduled for occupancy in the summer of 1984.

ACADEMIC CONSIDERATIONS

Medicine, as a profession deeply rooted in the culture of the society it serves, must be responsible to social needs and demands. Deficiencies in the medical system developed slowly in recent decades and assumed critical proportions in the last few years. Both the consumer and the provider of medical care now are expecting major changes in the practice of medicine and its capacity to serve all elements of our population. Medical education, although somewhat isolated from the day-to-day problem of medical care, has been drawn into the mainstream of crisis and change. In response to this challenge, the faculty of the College of Medicine has been deeply concerned with the adaptation of the educational programs to the needs of today and tomorrow.

THE CONTINUUM OF MEDICAL EDUCATION

The curriculum of the College of Medicine has several basic objectives. First, it is designed to instill in the medical student in the first year the attitude of a physician. By presenting the student with a clinical problem and sufficient basic science data to understand the organic malfunction, it is hoped the learning process will assume a meaningful significance. Second, the curriculum is designed to acquaint students with the different facets of medicine in such a fashion as to permit them to make an early choice from the many career offerings in medicine. Third, the study plan permits the student to assume the responsibility for developing an educational program relevant to their particular needs—a program which will permit him to derive maximum benefit from the learning process.

The present medical curriculum is the product of a trend over the last 50 years in which the medical school and its parent university have established close academic ties. This trend has had a great impact on the quality and character of medical education. It has facilitated the emergence of scientific medicine and increased sophistication of patient care (including preventive medicine). The price paid for these advances has been a rising cost of medical education and medical care, as well as an alienation of medical schools and their faculties from organized medicine and the practitioner. As our society approaches an important juncture in the development of health and medical care systems, the conflict between education and practice is becoming the cause of increasing concern for involved parties. Medical school faculties now are studying carefully the long-range aspects of their educational endeavors, as well as their position as proponents or intermediaries between opposite points of view. As a result of this review process, significant proposals for far-reaching change are being made, which will have a long-lasting impact on medical education and medical schools.

THE ART AND SCIENCE OF MEDICINE

The scientific basis of medicine universally is accepted as a prerequisite for medical practice—at least on an intellectual level. Too often, however, we are confronted with the idea that the practice of medicine is an art rather than a science; and furthermore, that too much science in medical education renders the future physician insensitive to the human needs of his patients. Frequently

medical students complain that entrance into medical school really does not bring about the expected change in fulfillment of their motivational desires. Often they feel removed from the art of medicine to the point where they cannot experience satisfaction or gratification of their emotional needs. As a result, a cynical attitude may emerge toward medical and patient problems, with a subsequent loss of motivation toward learning. The education experience must help the student to achieve a high quality blend of humanism and science, which will enable optimal medical care to be provided to patients. The faculty hopes some of the new programs will provide a blending of the art and the science of medicine.

Through careful planning, an effort will be made to use the fundamental knowledge of the basic sciences in a meaningful relation to career goals in medicine. While during Phase A (first year) the emphasis will be on sciences, it will focus on clinical medicine during Phase B (second year and first half of the third year). The opportunity to advance in both fields in a correlated fashion then will be offered in Phase C. It is hoped this program will contribute toward a resolution of the ambivalence between science and the practice of medicine.

The effect will be enhanced by an earlier beginning of clinical rotations by the student (second semester of the second year), thus eliminating prolonged frustration.

These two features are of special significance for modern medicine, since there is widespread recognition that delay between scientific discovery and its clinical application is too long and must be shortened. It is expected that the graduates of the program will have less difficulty in retaining a true feeling for a close relationship between science and practice.

FLEXIBILITY OF PROGRAMS

For many years, medical faculties attempted to adhere to a principle of completeness in spite of the increased volume of knowledge in the basic medical and clinical sciences. They added new courses and condensed old ones until the deluge of factual material over-extended the student's capacity for retention, as well as his or her facility for mental integration. In addition, the assumption was made that a single standard program of instruction would be adequate for all students accepted into the medical program. Experience at the University of Florida has since prompted consideration of the varying backgrounds of medical students and a flexible curriculum which will be relevant to the individual's needs and will permit incorporation for further developments in medical education. Consequently, the program at the University of Florida differs from the previous curriculum in the following ways:

1. The basic or core program no longer is designated to transmit the total knowledge presumed necessary for the practice of medicine. The emphasis has changed from presentation of content to the transmission of an educational process, whereby the student is largely required to seek out the necessary content. Admittedly, the student will have wide gaps in the knowledge of basic sciences and the practice of medicine, but should have sufficient information to make a rational and well-informed decision regarding further education.

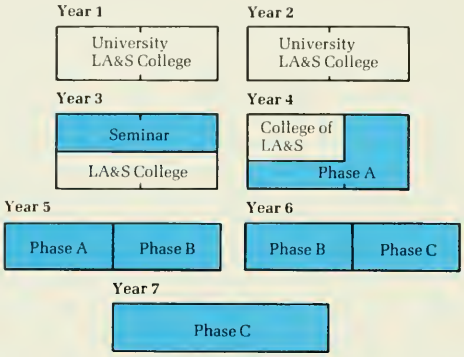
2. Although students in a medical school all share the desire to become physicians, their backgrounds and specific goals vary greatly. By permitting greater individualization, the curriculum will enable the student to adapt their personal program to previous educational experience, individual learning speed, and to career plans for the future. In providing for this flexibility, the medical curriculum will become an educational continuum beginning with professional education and culminating with continuing medical education for the practicing physician.

3. The medical program will endeavor to free the student from the classroom and provide an opportunity to pursue studies in the library or laboratory. While the regular course load for the first year of the medical student previously consisted of 34 to 36 hours per week, it has been reduced. The student with more time to devote to individual studies will require greater support also through guidance, counseling, teaching aids such as computer assisted instruction and others.

4. It is anticipated that the length of study in the medical program can be adapted naturally to the needs of the individual student. In some instances first year courses may be used to fulfill undergraduate degree requirements. In others, a student may embark on an early residency program or pursue a combined M.D.-Ph.D. degree program. The prime emphasis of the curriculum is on providing a program which has the elasticity to encompass individual needs and interests. In addition to the change in structure of the curriculum, two programs for entrance into medical school besides the traditional route have been developed:

JUNIOR HONORS MEDICAL PROGRAM

The Junior Honors Medical Program allows the highly motivated and qualified student to integrate the latter portion of premedical education with preclinical basic science medical education. Application to the program takes place during a student's second year of college. Students accepted into the program are simultaneously accepted into the College of Medicine. Third-year Junior Honors students take three required seminars during the junior year of college. These seminars provide the student with a solid background in biochemistry and other areas of preclinical basic science.



Emphasis on these seminars is placed on student participation in a relatively non-structured and informal format. In addition to the seminars, students continue to register for course-work within the College of Liberal Arts and Sciences. Many students in the program also become involved in research projects. The fourth year, the participants merge into the standard Phase A medical program. Since the College of Liberal Arts and Sciences grants credit for the third year seminars and most of the Phase A work, program participants are able to receive a B.S. degree at the end of the first year of medical school.

Students are eligible to apply if they have (1) completed at least one year (three semesters) of biology; (2) completed two courses (quarters) in calculus; (3) completed freshman chemistry and organic chemistry; (4) completed University of Florida's general education requirements, English, institutions and humanities either via course or placement credit and (5) have a 3.5 or higher grade point average. Students who have also completed their foreign language and/or physics requirements during their first two years are in a favored position with respect to application to this program. Although most applicants are second year students at the University of Florida, applications are also accepted from students not enrolled at the University of Florida who meet the requirements.

Additional information about the Junior Honors Medical Program and the application procedures may be obtained by writing the Assistant Dean for Preprofessional Education, College of Medicine, University of Florida, Gainesville, Florida 32610.

PROGRAM IN MEDICAL SCIENCES (PIMS)

The program in Medical Sciences (PIMS), an inter-university approach to medical education, began in the fall of 1971 at the Florida State and Florida A&M universities in Tallahassee. In this program, the two universities in the state capitol have combined efforts to provide instruction in the preclinical medical sciences parallel to the first year curriculum of the University of Florida College of Medicine. Since this instruction is integrated with traditional undergraduate degree programs in a college such as Liberal Arts and Sciences, the time permitted to achieve competency in the preclinical sciences is flexible. While it is expected that most students will spend five years in reaching this level, a number of accelerated students may do so in four years, others in six.

Participation and enrollment in PIMS courses is limited to full-time undergraduate students at Florida State and Florida A & M universities. From among those students accepted into the PIMS Program after satisfactory completion of the required curriculum, an evaluation committee with the approval of the College of Medicine Dean selects those students that may transfer to the University of Florida College of Medicine at the second year level. The remaining three years of medical education are completed at the University of Florida College of Medicine if satisfactory progress is made.

The curriculum is designed around a nucleus of existing courses in the social, biological and physical sciences at Florida State and Florida A & M universities, and contains all of the traditional basic science disciplines, short of physical diagnosis and systemic pathology. Clinical seminars and other clinical experiences are furnished by the community of practicing physicians in Tallahassee with the cooperation of Tallahassee Memorial Hospital, the Florida State University Health Service, and Sunland Training Hospital.

Detailed information on the Program in Medical Sciences can be obtained by writing the Office of the Director, Program in Medical Sciences, Florida State University, Tallahassee, 32306.

JACKSONVILLE HEALTH EDUCATION PROGRAMS, INC. (JHEP)

Eleven hospitals in nearby Jacksonville formed the Jacksonville Health Education Programs, Inc. (JHEP) with the goal of improving medical education in the community. In 1969, by action of the Board of Regents, JHEP became a division of the J. Hillis Miller Health Center. An assistant vice president and a full-time faculty for the College of Medicine are in residence in Jacksonville.

There are elective and required assignments in a variety of clinical areas available in Jacksonville. These afford the opportunity to observe patients in a community hospital setting and to become acquainted with the many problems of health care delivery in the urban area. In addition to ex-

posure to a large full-time faculty, the student works with practitioners and can learn of the many nuances of practice removed from the academic center.

A number of residencies are conducted in Jacksonville. Residents participate in the teaching of students. JHEP conducts a number of programs for continuing education of practicing physicians to which students are welcome.

A nationally copied medical library system supports the teaching and research activities with extensive periodical holdings, bibliographic services, and audiovisual collections.

PENSACOLA EDUCATIONAL PROGRAM, INC. (PEP)

A unique academic affiliation between the College of Medicine and the Pensacola Educational Program (PEP) has been established. This affiliation provides the undergraduate medical student from the University of Florida an opportunity to obtain a variety of clinical elective experiences in Pensacola. In addition, numerous opportunities exist for graduate and postgraduate educational programs between the two institutions.

COMMUNITY MEDICINE

The development of the University of Florida's Shands Hospital has played an important part in accelerating the emergence of scientific medicine by providing ideal conditions for certain aspects of clinical teaching. The student in the teaching hospital, however, is confronted with highly selected types of patient problems, which in the outside world are exceptions rather than the rule. Less insight is gained into the day-to-day problems of minor and major illnesses as they occur in the community.

The College of Medicine has developed educational programs in various community settings to provide medical students and physicians-in-training with experiences in the common medical problems of ambulatory health care. The rural health activities of the College of Medicine are renowned for their contributions to patient care and medical education.

By extending the education of medical students into the community, students are also provided the opportunity to view and understand the non-clinical factors of family and community groups and institutions that affect medical care. Every medical student will participate in a community health clerkship which also includes an opportunity for a brief preceptorship with a practicing physician. Through these community experiences the faculty and students together will become familiar with the common medical ills seldom seen in a hospital.

A basic premise in the community health programs of the College of Medicine is that they will direct the talents of the faculty toward the problems of health care delivery and engage the interest and enthusiasms of the medical students toward their future resolution.

PREPROFESSIONAL EDUCATION

The undergraduate college years are uniquely important to the education and training of a physician. The role of the physician in the community, as well as the quality of the health care delivered, will reflect the breadth of liberal education as much as it does the depth of professional education. It is difficult to overstate the importance to the future physician of a strong background in the social-cultural area of study as increasing recognition is paid to the environmental and behavioral aspects of disease and the continuity of health care within the community.

This does not imply that the student's knowledge of physical and biological sciences is of less importance; on the contrary, the scientific basis of our understanding of disease processes is rapidly expanding. Rather, it emphasizes the desirability of a carefully selected program in liberal education with a strong core of understanding of the principles of physical and biological science.

The preprofessional student's educational program, as well as the selection of activities, should lead to the development of intellectual maturity and judgment, efficient study habits, and effective powers of reasoning. These goals of personal development, added to the importance of basic knowledge obtained in the social, cultural, and natural science areas of study, emphasize the significance of the liberal arts for the education of a physician.

THE APPLICANT POOL

Generally, students applying for admission should plan to complete the requirements for a bachelor's degree. However, a limited number of well-qualified students may be accepted without fulfilling the degree requirements, provided they show evidence of sufficient preparation for the study of medicine.

Personal qualities of a high order, a genuine concern for human welfare, and superior intellectual achievement are the primary requirements for admission. Such intellectual achievement is indicated in part by performance in undergraduate courses. Applicants with an overall "B" average as a minimum will receive strongest consideration for admission to the College of Medicine.

The College of Medicine admits both men and women to its entering classes. Members of minority groups are also strongly encouraged to apply. A limited number of out-of-state students, in proportion to the number of Florida residents as a whole, may be admitted.

ADMISSION TO THE COLLEGE OF MEDICINE AT AN ADVANCED STANDING STATUS

A person may seek transfer to the College of Medicine from a United States or Canadian medical school. Individuals who already have received a degree from a college of medicine will not be

admitted to the M.D. curriculum at advanced standing status. A person may be admitted to the College of Medicine at an advanced standing status within the context of the following guidelines:

1. Applicants currently pursuing graduate level work toward a Ph.D. degree or other professional degrees are required to complete all degree requirements prior to application for admission to the College of Medicine.
2. Previous professional or graduate education is adjudged adequate in quantity, quality, and time frame to have been competitive for admission as a first-year student at this college and to permit entry into the curriculum at a level beyond the first year. An applicant who is, for any reason, on probation or not in good academic standing at the school from which transfer is sought will not be recommended for transfer to this college.
3. A vacancy exists for the admission of a person to advanced standing status. A vacancy exists only when, for any reason, an enrolled student physician, beyond the first year and prior to the fourth year in the College of Medicine, cannot continue his or her matriculation in the College of Medicine.
4. An individual who is accepted for admission to advanced standing status will be awarded a degree only if he or she is enrolled in the college a minimum of twenty-four months.

Initial consideration of an applicant for advanced standing will be undertaken only when the applicant furnishes the following information upon request:

1. A signed narrative written by the applicant expressing the circumstances which prompted the request to transfer at an advanced standing status.
2. Letter of recommendation from the dean of the professional or graduate school in which the applicant either was enrolled or is presently enrolled.
3. Official transcripts of **all** post-high school academic course work.
4. Medical College Admissions Test.
5. Proof of successful completion of Part I of the National Medical Board Examination if the applicant is or has been enrolled in a school of medicine.
6. A properly executed information form furnished by the Office of Admissions.
7. Proof of United States citizenship.

An applicant judged to be qualified on the basis of the furnished information may be extended an interview. Applications for admission at advanced standing will not be processed unless a vacancy exists in the respective class for which the application is made.

Special programs of study leading to graduate degrees in the basic medical sciences and admission requirements for these programs are outlined on page 39 of this Catalog.

BASIC SCIENCE REQUIREMENTS

The minimum science admission requirements include basic introductory courses and laboratories in the following subjects:

Biology—8 semester hours (12 quarter hours)
General (Inorganic) Chemistry—8 semester hours (12 quarter hours)
Organic Chemistry—8 semester hours (12 quarter hours)
Physics—8 semester hours (12 quarter hours)

Many students desire an additional background in science. For this purpose, courses in physiology, biochemistry, embryology, physical chemistry, microbiology and genetics should be considered. It is not necessary to choose one of the sciences as a college major.

No specific requirement is set in the area of mathematics since, at most colleges, some mathematics is prerequisite to physics and chemistry. In general, some college level work in calculus is strongly recommended. Familiarity with the principles of statistics and their application to the analysis of data is an important asset for any medical student. A knowledge of computers and computer programming would be valuable for the application of these tools in medical education and in all forms of the delivery of health care.

Consideration should be given by the student to participation in honors courses, independent study, and scientific research. These activities present opportunities for unstructured learning experiences and explorations of certain areas in considerable depth.

Electives: The remainder of the college work should be distributed throughout the humanities and social, biological, and behavioral sciences. The student should select subjects which are stimulating intellectually, challenge a maximum performance, and contribute to the overall development and maturation of the student. The courses may aim toward a thorough study of a single area with a general background in many areas or may group in several related areas in the sciences or humanities.

The discriminate selection by the student of elective courses will not only increase the store of knowledge, but will help form attitudes basic to a professional career in medicine. Development of certain skills will place the student at ease in a professional school.

Extracurricular Activities: Extracurricular activities and employment both during the academic year and the summers can make important contributions to an individual's development. Experience in medical and paramedical areas often contributes toward an understanding of health care delivery problems and helps to solidify the basis of the student's motivation toward a career in medicine.

Discipline in study is essential. Skill in accurate, rapid, interpretive reading should be mastered. Methods of observation and collection of data, evaluation, deduction, and interpretation of findings are taught in psychology, physics, and other sciences. The analysis and organization of a set of observations into its simple components and the synthesis of many fragments of data into a

working hypothesis on which a plan of action can be based are taught in many courses. Students should keep these objectives in mind throughout their preprofessional training.

A high degree of skill in the use of spoken and written languages should be developed accurately to extract a story, systematically record facts for the use of others, and precisely transmit instructions. These techniques are taught in courses in English literature and composition. The study of foreign languages also illustrates the exact meaning of words and the use of subtle differences in shading.

Communication through symbols is taught in chemistry, physics, and mathematics. Proficiency in typing increases the speed and accuracy of communication and will aid students in their professional work.

Medicine deals with individuals who react to their physical, social, and cultural environment. Functional derangement induced by the interplay of emotional factors in the individual or by external influences from the environment can be detected by subtle methods. The study of emotional factors is taught in philosophy, religion, psychology, and the fine arts, while the study of social forces is considered in history, literature, economics, sociology, and law. Since all of these factors may induce reactions during physical illness which exceed that produced by the disease itself, the study of principles in these areas is most important to the education of a physician.

MEDICAL COLLEGE ADMISSION TEST (NEW)

Every applicant must take the New Medical College Admission test, preferably in the spring preceding the submission of his or her application. As of 1977, this examination replaced the old Medical College Admission Test and all candidates applying or reapplying for the class beginning in September 1985 are required to have taken the New MCAT. The test is given twice yearly in many colleges and universities. For further information about the test, write to The American College Testing Program, P.O. Box 414, Iowa City, Iowa 52240.

APPLICATION AND ACCEPTANCE PROCEDURES

Admission to the College of Medicine is highly competitive and the applicant is appraised on the basis of information gained from previous academic records, scores on the Medical College Admission Test, recommendations by premedical advisors and teachers, and personal interviews. The College of Medicine endeavors to select those students who appear, by present standards, the most qualified for a career in medicine. Similarly, the student is expected to make a careful choice of that institution which offers an environment and program most suited to his or her interests and personality. A personal visit to the school of his or her choice should be most helpful.

1) The College of Medicine is a participating institution in the American Medical College Application Service (AMCAS). The AMCAS application form may be obtained after June 1 from any of the participating institutions or from the Office of the Registrar, University of Florida, Gainesville, Florida 32611.

2) To be competitive with other applicants, it is highly recommended that the minimum science admission requirements should be completed prior to making application.

3) After careful screening of the initial applications by the Medical Selection Committee, promising applicants will be sent an additional formal application requesting information not included on the AMCAS application. The completed form should be returned directly to the University of Florida and arrangements made for submission of a preprofessional committee evaluation or letters of recommendation. This second phase requires an application fee of $15 from all students not previously enrolled in the University of Florida. This fee is not refundable. All materials should be submitted as early as possible, but no later than December 1 of each year.

4) Following committee review of all the application materials, interviews with members of the Medical Selection Committee will be arranged for competitive applicants. These interviews are usually held on Fridays and Saturdays at the University of Florida College of Medicine campus in Gainesville.

5) After receipt of an acceptance, a written reply to the College of Medicine is expected within two weeks. There is a wide variety in acceptance dates of different medical schools and therefore some students may wish to reconsider after filing a declaration of intent. This is a perfectly acceptable procedure, provided the student promptly sends written notification to every school holding a place for him or her.

6) No deposit is required from accepted applicants, but if they accept the offer of a place, they have an obligation to matriculate unless they are released by the school. Such release is granted automatically upon request by the student.

The above procedures are approved by the Association of American Medical Colleges.

WU
Place books on carts Do not reshelve

PROFESSIONAL EDUCATION LEADING TO THE M.D. DEGREE

Once a decision has been reached by both the medical school and the applicant, the student enters the professional portion of the educational continuum. From this point on, the student will pursue his or her educational endeavors from the vantage point of a physician striving to achieve well-rounded capacities as a physician-humanist and scientist in his or her profession and community.

The four years of medical education is divided into three parts (blocks of time), which are identified as Phases A, B, and C. During Phase A, students are provided a core of basic sciences. Phase B provides required preclinical and clinical experience. Phase C, which occupies the remainder of the academic experience, is primarily elective time.

PHASE A

Phase A is designed to provide students with essential basic science information necessary for their clinical training. Teaching teams will be drawn from both the basic and clinical science departments. The course schedule may be broken down in the following manner:

Biochemistry and Molecular Genetics consists of lectures and discussion sessions designed to increase the student's basic biochemical knowledge of cellular functions in health and disease including genetic disorders. The nutrition, physical chemistry, metabolism, and molecular biology of mammalian cells are stressed including such subjects as homeostasis, inborn errors of metabolism, cell genetics, and medical aspects of human genetics.

Gross Anatomy represents an introduction to the basic structure and mechanics of the human body. The dynamics of learning occur primarily in the laboratory and are supplemented with lectures, conferences, and demonstrations as needed.

Human Systems Development covers early human development including gametogenesis. The major emphasis of the course is on normal human organ development and morphogenesis. A system approach, correlated with the normal gross anatomy of those systems, is used.

Medical Microbiology deals with the study of bacteria, fungi and parasites and the processes by which they produce infectious diseases.

Medical Immunology introduces the student to fundamental principles of immunology. Problem solving approaches are stressed.

Medical Virology covers fundamental principles of clinical virology utilizing a lecture and discussion group format.

Microscopic Anatomy is a course in which the microscopic structure of the cells, tissues, and organs of the human body is taught. Correlation of structure and function is emphasized.

Principles of Physiology covers the mechanisms of physiological processes with special reference to the human body. Bioelectricity, homeostasis of body fluids, muscle, circulation of blood, renal function, respiration, digestion and hormones are studied.

Medical Neuroscience is designed to provide students with the fundamental information concerning the organization and function of the central nervous system.

Introduction to Human Behavior deals with the human life cycle and the different psychosocial factors affecting the physician and the patient. Individual students or groups of students will interview patients under the supervision of the psychiatry and general medical-surgical faculty.

PHASE B

Phase B is designed to give a broad experience in clinical medicine. The initial 27 weeks of Phase B include the following courses:

Systemic Pathology emphasizes the effects of disease on the human organism and the correlation of disease with symptoms, signs and the course of illness.

Physical Diagnosis and *Introduction to Clinical Medicine* emphasizes skills necessary for history-taking and physical examination of patients. An extended lecture series provides an introduction to the clinical practice of medicine, preparing the student for the upcoming ward experience.

Social and Ethical Issues in Medicine explores the patient's interactions associated with disease, treatment, family and community.

Disorders of Thinking, Emotion, and Behavior familiarizes the student with common clinical syndromes and improves the student's interviewing techniques.

Pharmacology will present concepts of drug action, introduce major classes of drugs, and emphasize the biochemical and physiological basis for understanding drug action.

The major portion (12 months) of Phase B will be devoted to the clinical clerkships, in which groups of students will rotate among the major clinical services experiencing direct patient contact. During the clerkships, the student will become an integral member of the medical team and will be responsible for his/her patient during all hours of the day or night.

Each clinical service conducts a variety of seminars and conferences. These are considered to be part of the clerkship and should be attended.

PHASE C

Phase C occupies the last 13 months of the curriculum and consists of elective experiences combined with two, one month required clerkships in medicine and surgery as well as an 11 week review of basic sciences consisting of clinical pharmacology, microbiology and infectious diseases, and pathophysiology.

COLLEGE OF MEDICINE CURRICULUM

Year I (Phase A)

BIOCHEMISTRY AND MOLECULAR BIOLOGY BMS 5201C (12 weeks)	MEDICAL MICROBIOLOGY BMS 5004 (5 weeks)	PHYSIOLOGY BMS 5000 (11 weeks)	MEDICAL NEUROSCIENCE BMS 5005 (5 weeks)
GROSS ANATOMY BMS 5100C (14 weeks)	MEDICAL IMMUNOLOGY BMS 5006 (3 weeks)		
HUMAN SYSTEMS DEVELOPMENT BMS 5121 (8 weeks) / MEDICAL ASPECTS OF HUMAN GENETICS BMS 5202 (5 weeks)	MEDICAL VIROLOGY BMS 5007 (3 weeks)	MICROSCOPIC ANATOMY BMS 5110 (11 weeks)	ASPECTS OF HUMAN BEHAVIOR BMS 5002 (1 week)

Year II (Phase B)

SYSTEMIC PATHOLOGY BMS 5600 (27 weeks)	CLINICAL ROTATIONS (8 weeks each)
PHYSICAL DIAGNOSIS AND INTRODUCTION TO CLINICAL MEDICINE BMS 5830 with Radiology and Ophthalmology (27 weeks)	
PHARMACOLOGY BMS 5460 (16 weeks)	
DISORDERS OF THINKING, EMOTION, AND BEHAVIOR BCC 5151 (9 weeks) / SOCIAL AND ETHICAL ISSUES IN MEDICAL PRACTICE BMS 5822 (6 weeks)	

Year III (Phase B)

CLINICAL ROTATIONS (8 weeks each)

(Phase C)

BASIC SCIENCE REVIEW: Clinical Pharmacology Microbiology/Infectious Diseases Pathophysiology (total of 11 weeks)

Year IV (Phase C)

ELECTIVES (4 weeks each) 10 months
Medicine and Surgery Clerkships (4 weeks each) 2 months

The students thus are able to design a program which permits extensive elective time in a clinical or basic science area, an early experience related to their career choice, or an exploration of their interests among several career choices. Considerable freedom is permitted the students in designing their program, but the choices must be made carefully in conjunction with the student's faculty advisor. Remediation may take place in Phase C upon recommendation by the Academic Status Committee, appropriate department, and faculty advisor.

Any students academically below the middle of the class requesting to study away are asked to obtain their advisor's permission and that of the Academic Status Committee Chairman. Any student whose request exceeds a three month period of study at other institutions must be reviewed by the Academic Status Committee Chairman and the student's advisor.

Clinical assignments are available in all of the major disciplines of medicine. The student may work as an advanced clerk, assuming greater responsibilities than in Phase B, or in special cases may qualify for internship at an earlier time.

Estimated percentages of time and credit hours allotted for various Phase C offerings have been calculated on the basis of credit hours per academic semester. Each student is expected to complete a minimum of 52 semester credit hours in Phase C for graduation. Each student is required to take electives up to graduation regardless of the total hours accumulated.

The curriculum is constantly undergoing evaluation and refinement. Changes may occur from year to year in order to improve the educational program of the undergraduate student of medicine.

The provisions of this catalog are not to be construed as an irrevocable contract between the student and the College of Medicine. The college reserves the right to effect policy and regulatory changes at any time.

EVALUATION

Students entering the program of the College of Medicine are highly motivated and are considered graduate students in a program of professional education. They are preparing themselves for a career requiring excellence of scholastic endeavor, moral integrity, sound judgement, intellectual curiosity and above all, a drive to continue their education vigorously after graduation. It is hoped that the system of evaluation will assist them in attaining their objectives.

Since the evaluation of the student must provide information on both the student and the educational program, new policies for evaluation were instituted at the same time the new curriculum was implemented.

There are three major components of the evaluation system — project tests given by the various teaching units throughout the program; National Board Examinations Part I to be administered in June of the third year and Part II in April of the third year, and progress reports prepared by the members of the faculty.

Grades submitted by the faculty of the various curricular units, and the scores of the National

Board Examinations, will be the information used by the Academic Status Committee in preparing recommendations regarding promotion, graduation, and general ranking of students. Students must receive a passing grade in every course before recommended for graduation. Courses in which failing grades have been given must be repeated or remedial work performed in a manner approved by the Associate Dean for Student Admissions and Activities, the chairman of the respective department, and the student. National Board Examinations Parts I and II must be passed before the student is graduated.

Students may, at their request, receive grades as submitted to the Office of Student Affairs. At the end of each semester, the Academic Status Committee will review each student's performance on the basis of his/her academic and non-academic performance and recommend to the dean a suitable course of action. 1) A grade of "D" is passing but connotes borderline academic performance. 2) PROBATION: Probationary status occurs when a student's performance is marginally passing as determined by the Academic Status Committee. A student may be removed from probation after he or she demonstrates improvement in subsequent course work. Failure to improve performance may result in dismissal. 3) Any student receiving failing grades (F) in courses totalling 8 or more credit hours, or D grades in 50% or more of the credit hours, in a Phase, will be automatically dismissed. A student has the right to appeal academic dismissal to the Academic Status Committee within 14 days after receiving written notification of dismissal. 4) If a student is permitted to repeat a year because of academic difficulties, he or she shall automatically be dismissed if a grade below a C is received in any course work. 5) A student is subject to disciplinary action up to and including expulsion for violation of the University Conduct Code or the University Academic Honesty Guidelines. A student is expected to maintain the requisite integrity, attitude, motivation, and personal and professional conduct deemed essential to the practice of medicine. 6) Students have the right to appeal non-academic disciplinary actions through the appropriate committee to the university's Office of Student Affairs. Such appeals must be submitted in writing within two working days of notification of the decision.

The Academic Status Committee will recommend to the dean those students who have satisfactorily met its requirements and are eligible for graduation. Superior students may be recommended for graduation with honors. Nomination and selection of students will be made by the faculty. Excellence of different types in varied fields will be considered, such as superior academic work, outstanding student research and thesis, and other special achievements.

STUDENT CONDUCT CODE

Students enjoy the rights and privileges that accrue to membership in a university community and are subject to the responsibilities which accompany that membership. In order to have a system of effective campus governance, it is incumbent upon all members of the campus community to notify appropriate officials of any violations of regulations and to assist in their enforcement. All conduct regulations of the university are printed and made available to all students and are applicable upon publication in the *Independent Florida Alligator*, the *University Catalog*, the *Student Handbook*, or other reasonable means of notification.

Violation of the Code of Conduct. A student may be expelled or receive any lesser penalty for the following offenses:

1) Furnishing false information to the university with intent to deceive. This includes cheating and plagiarism.

2) Forgery, alteration, or misuse of university documents, records, or identification cards.

3) Unauthorized use, taking or destruction of public or private property on campus, or acts committed with disregard of possible harm to such property.

4) Actions or statements which by design or consequence amount to intimidation or hazing.

5) Participation in or continued attendance at, after warning to disperse by a university official, a raid on a university living unit.

6) Disorderly conduct.

7) Disrupting the orderly operation of the university as defined in Florida Statutes, Board of Regent's Policies, and the Demonstration Policy of the university.

8) Failure to comply with a university rule or regulation.

9) Violations of Housing, Interhall, and Area Council regulations.

10) Violation of conduct probation.

11) Possession, use, or delivery of illegal drugs as defined in Florida Statutes, and use of exploding fireworks as defined in Florida Statutes.

12) Possession of a firearm on the university campus except as specifically authorized by University Policy on the Possession and Use of Firearms.

13) Actions or conduct which hinders, obstructs, or otherwise interferes with the implementation or enforcement of the Student Conduct Code.

14) Failure to appear before the Committee on Student Conduct or the Director of Student Judicial Affairs and to testify as a witness when reasonably notified to do so. Nothing in this subsection shall be construed to compel self-incrimination.

15) Violation of any municipal ordinance, law of the State of Florida, or law of the United States.

16) Ticket scalping: selling tickets to any University of Florida function for more than the original price.

17) Possession or use of fireworks, explosives, dangerous chemicals, ammunition and weapons (including bows and arrows or switchblade knives).

18) Actions which are committed with disregard of the possible harm to an individual or group, or which results in injury to an individual.

19) Violation of the University of Florida Academic Honesty Guidelines.

HEALTH CENTER STUDENT CONDUCT STANDARDS COMMITTEE

The Health Center Student Conduct Standards Committee has responsibility for the adjudication of violations of the University of Florida Academic Honesty Guidelines for students enrolled in the College of Medicine. The Committee is composed of four faculty members and one student, appointed by the president of the university. Sanctions available to the Committee include reprimand, conduct probation, suspension, or expulsion. The Committee will furnish to students charged with a violation of the Academic Honesty Guidelines rules of procedure that include the following:

A. The right to be notified in writing of the charges against him/her with sufficient detail and time to prepare for the hearing;

B. The right to a prompt hearing before an appropriate official, committee, or court;

C. The right to know the nature and source of the evidence which will be used against him/her;

D. The right to present evidence in his/her own behalf;

E. The right to freedom against compulsory self-incrimination; and

F. The right to appear with an advisor at the hearing.

A decision made by the Health Center Student Conduct Standards Committee may be appealed to the president of the university, and must be filed within two working days of notification of the decision.

ACADEMIC HONESTY GUIDELINES

Violations of the Academic Honesty Guidelines include, but are not limited to, the items listed below:

Taking of Information — copying graded homework assignments from another student; working together on a take-home test or homework when not specifically permitted by the instructor; looking at another student's paper during an examination; looking at your text or notes during an examination when not permitted.

Tendering of Information — giving your work to another to be copied; giving someone answers to exam questions when the exam is being given; after having taken an exam, informing another person in a later section of questions that appear on that exam; giving or selling a paper to another student.

Plagiarism — copying homework answers from your text to hand in for a grade; quoting text or other works on an exam, term paper or homework without citation when requested by the instructor to present your own work; handing in a paper purchased from a term paper service; retyping a friend's paper and handing it in; taking a paper from files and handing it in.

Conspiracy — planning with one or more fellow students to commit any form of academic dishonesty together; giving your paper to another student you know will plagiarize it.

Misrepresentation — having another student do your computer program; lying to a professor to increase your grade.

Bribery — offering money or any item or service to a faculty member or any other person so as to gain academic advantage for yourself or another.

COLLEGE OF MEDICINE DRESS CODE POLICY

The dress code is: no shorts; clean shirts and shoes for graduate students and students in the preclinical years. Ties for men, and white lab coats with name tags shall be worn by all students and housestaff who have any contact with patients or patient care areas.

GRADUATE AND POSTGRADUATE PROGRAMS

GRADUATE EDUCATION IN THE MEDICAL SCIENCES

Programs Leading to the Ph.D. and M.S. Degrees

The educational continuum of the medical sciences is designed to provide flexibility in terms of the type of degree which may be earned as well as the type of subject matter which may be included in the individual curriculum.

Programs leading to the Ph.D. degree in medical sciences are offered by the College of Medicine through the Graduate School of the university. The programs offered in anatomy, biochemistry and molecular biology, immunology and medical microbiology, neuroscience, pathology, pharmacology and therapeutics, and physiology are intended to give talented individuals an opportunity to engage in careers of research and teaching in the basic scientific medical disciplines. The Department of Biochemistry and Molecular Biology also offers a program leading to the Ph.D. in biochemistry.

The M.S. degree in the medical sciences is offered by the Departments of Anatomy, Biochemistry and Molecular Biology, Immunology and Medical Microbiology, Neuroscience, Pathology, Pharmacology and Therapeutics and Physiology. The Department of Biochemistry and Molecular Biology offers the M.S. degree in biochemistry.

The prime requirements for admission to these programs are personal integrity, motivation, and general scholastic achievement. Candidates must satisfy the general requirements for admission to the Graduate School and produce a satisfactory score on the Graduate Record Examination. Candidates should have an undergraduate major in a biological or physical science, but other undergraduate areas of concentration appropriate for study in the basic medical sciences are engineering and mathematics. In order to remedy deficiencies in their backgrounds, some candidates may find it necessary to take additional undergraduate courses even though they hold the A.B. or B.S. degree required for Graduate School admission.

The completion of a satisfactory dissertation based on original research is the most important sin-

gle requirement of the Ph.D. program. Most of the work involved in the dissertation ordinarily will be done in the last two years of residence, but candidates will be encouraged to begin their research in a preliminary exploratory fashion toward the end of their first year. Graduate education in the basic medical sciences is planned from an interdisciplinary point of view, but with a major in the fields of anatomy, biochemistry and molecular biology, immunology and medical microbiology, neuroscience, pathology, pharmacology and therapeutics or physiology. A minor is not required but may be elected in any relevant discipline approved for graduate study in the university.

Graduate students have the opportunity of assisting in the teaching of medical and undergraduate courses and most students are advised to do this as part of their training. Teaching assistantships and nonresident tuition scholarships are available to a limited number of students.

Medical Scientist Training Program (Combined M.D.-Ph.D. Degree)

The Medical Scientist Training Program is designed for highly qualified students who are strongly motivated toward an academic career in the medical sciences. This is a flexible six to seven year program which attempts to provide in-depth graduate education in one of the basic science disciplines, a rigorous medical education, and an introduction to clinical investigation.

Candidates for the program must satisfy admission requirements for the College of Medicine and the Graduate School. Since successful candidates are selected from those admitted to the College of Medicine, application begins with standard application to the medical school. All candidates who receive the supplemental application forms will be given the option to apply for the Medical Scientist Training Program; direction for such application is provided at that time. Successful applicants are expected to achieve satisfactory scores on the Medical College Admission Test and to have personal qualities of high order, superior intellectual accomplishments and genuine interests in human welfare and an academic career. The Graduate Record Examination may be required before matriculation.

The student will enroll in all courses for the M.D. degree. In addition, the student will be required to complete the requirements for the Ph.D. as established by the university and the department in which dissertation work is undertaken. In most cases, that department will be one of the seven basic science departments in the College of Medicine, but other departments in the university are acceptable alternatives. The student will receive credit toward both degrees for those courses applicable to each. In addition, special seminars and courses in human biology and clinical research are incorporated into the program.

The program is designed to be flexible, and the Medical Scientist Training Program Steering Committee will assist the student in planning the curriculum and determining progress. In most cases, the student will be expected to initiate a research project during the summer before starting medical school and select a graduate department at the end of the summer. Graduate studies will likely be integrated into an extended Phase B of the medical school curriculum. Students will be evaluated by examination similar to those in the separate M.D. and Ph.D. programs. The Com-

mittee on Academic Status of the College of Medicine will evaluate the student's performance and recommend promotion to the next class or awarding of the M.D. degree. The Graduate Advisory Committee, in conjunction with the department from which the student will receive the Ph.D. degree, will assess the graduate performance.

Most, if not all, students accepted to the program can anticipate financial support (graduate research assistantships) during the graduate portion of the program. In addition, a minimum of two students per year will be awarded annual stipends of $7000 for at least six years on the condition that both degrees are obtained.

Inquiries regarding this program may be directed to the Office of the Director, Medical Scientist (M.D./Ph.D.) Training Program of the College of Medicine, but applications to the program are coordinated with application to the College of Medicine as described above.

GRADUATE MEDICAL EDUCATION (RESIDENCIES AND FELLOWSHIPS)

All programs of residency training offered in Shands Hospital and the VA Medical Center are fully accredited and approved by the American Medical Association Accreditation Council on Medical Education and are listed in the Directory of Approved Residencies. In addition, the Senate of the university formally recognized these programs as academic non-degree programs of the College of Medicine at its meeting of June 26, 1969. The hospitals hold certification from the Joint Commission on Accreditation of Hospitals. Each of the various residency training programs has been approved by the Accreditation Council on Graduate Medical Education.

The residency programs only accept individuals who are graduates of medical schools accredited by the Liaison Committee on Medical Education and graduates of foreign medical schools who hold the ECFMG certificate and/or pass the Visa Qualifying Examination.

Residencies: Residencies vary in length with each of the services (between two and five years). Formal residencies are offered in anesthesiology, family practice, medicine (internal medicine), neurology, neurosurgery, obstetrics and gynecology, ophthalmology, orthopaedic surgery, pathology, pediatrics, psychiatry, radiology and its subspecialties, and surgery (general, plastic, thoracic, otolaryngology, and urology).

Stipends accompany each residency. Housing at moderate cost is adjacent to the Health Center and is described on page 53.

Fellowships: A limited number of clinical fellowships are available in the various subspecialties of anesthesiology, family practice, medicine, pathology, pediatrics, psychiatry, radiology, and surgery to qualified applicants with some previous residency training and/or research pursuit. There are some traineeships which are at a slightly more advanced level pointing toward basic training for academic careers in clinical disciplines and the basic medical sciences. A postgraduate training program in laboratory animal medicine is also available.

Opportunities also exist for selected fellows to work toward the M.S. degree in the medical sciences in one of the basic science departments offering such programs.

Applications: Detailed program information and applications for these programs may be obtained by writing the appropriate departmental chairman, chief of service, or the Office of the Dean, College of Medicine.

LICENSURE

Licensure to practice medicine and surgery in Florida can be obtained by endorsement if the applicant has been certified by licensure examination of the Federation of State Medical Boards of the United States, Inc. (FLEX) or is certified by the National Board of Medical Examiners as having completed its examination; provided that said examination required shall have been so certified within the ten years immediately preceding the filing of the application for licensure. Such a license is good only if the recipient engages actively in medical practice for a minimum of one year. Graduates of approved medical schools in the United States and Canada are eligible for this endorsement. In addition, graduates of foreign medical schools who otherwise are qualified and whose credentials have been evaluated by the Educational Council for Foreign Medical Graduates (ECFMG), and who have passed the American medical qualification examination for foreign medical graduates, may be considered for endorsement. The applicant must have completed at least one year of approved internship or five years in private practice in the United States or legally have declared intention to become a citizen and have been a resident of the United States for a minimum of one year.

Since various state laws differ as to licensure requirements, it is the responsibility of the medical student to become familiar with the qualifications for licensure in the state or states which he or she might consider as potential locations for the practice of medicine.

CONTINUING EDUCATION

The physician's proficiency in the practice of medicine depends on the commitment to continuing education. The College of Medicine recognizes its role in assisting with this aspect of education and has designated to a member of the academic staff the responsibility for inaugurating an effective means of strengthening the education continuum through postgraduate medical education. To facilitate such a program, the Office of Continuing Medical Education was created.

The Office of Continuing Medical Education has assessed the needs of the practicing physician and, working with its advisory committee, plans workshops, conferences, seminars and symposia to help the practicing physician meet continuing medical education requirements to maintain membership in the Florida Medical Association. These programs meet the standards of the American Medical Association for the Physician's Recognition Award. In addition, departments and divisions within the College of Medicine offer specialty rounds and conferences that the practicing physician is eligible to attend. The interest of the practicing physician in these programs has been encouraging, and is a tribute to the desire of the medical profession to keep abreast of the current trends in medicine.

Continuing medical education personnel are available for consultation in the program design of educational techniques, chart audit, and peer review as they relate to educational objectives of an individual hospital. Other programs in continuing medical education are conducted in cooperation with the Florida Board of Regents, the Florida Medical Association, the Florida Academy of Family Physicians, and a variety of medical specialty groups.

STUDENT INFORMATION

FINANCIAL CONSIDERATIONS

The fee structure for Florida residents and nonresidents in the M.D. program of the College of Medicine is under revision at the time of this printing. Fee information can be obtained after July 1, 1984, by contacting the Student Financial Services, Room 100 THE HUB, Gainesville, Florida, 32611. Students are registered for two semesters during their first and fourth years and for three semesters the second and third years. Fees and method of payment are subject to change and are payable in accordance with the university regulations. The Registration Fee includes a Student Health Fee and a Student Activity Fee for each of the semesters. Most of the services and facilities of the Student Health Services are available to students without charge. A group insurance program sponsored by Student Government is available at a very reasonable cost. The Activity Fee covers the student's attendance at a wide variety of social, athletic, and cultural events which are offered by the university.

Registration dates for each class in the College of Medicine are set by the Registrar's Office and the students are notified when their group is expected to complete registration. These fees must be paid in accordance with dates published in these instructions or they are increased by $25.

Students who are interested in doing work toward an advanced degree in the medical sciences should consult the Bulletin of the Graduate School for information concerning tuition and fees.

Textbooks and instruments needed by a first-year student will require an expenditure of about $600-$800. Purchase of a microscope will not be required as the College of Medicine, through a special fund, has established a microscope bank and provides each entering student with a microscope on a loan basis.

The minimal annual cost for a single Florida resident for the first year is $7,500 plus tuition.

SCHOLARSHIPS

AMA-ERF Scholarship: Awarded to an outstanding first-year candidate for the Ph.D. degree.

AMA-ERF Scholarship: Awarded to an outstanding first-year candidate for the joint M.D./Ph.D. degree.

The Charles O. Andrews, Jr. Scholarship Fund: A merit scholarship fund established in 1978 in memory of Judge Andrews and awarded annually to a M.D.-Ph.D. student.

W. Paul Bateman Scholarship: Established by the Bateman Foundation to assist worthy medical students in need of financial assistance.

The Maurice H. Givens Scholarship Fund: An endowed fund established in 1975 to provide financial assistance to students in the College of Medicine.

The Mr. and Mrs. W. A. Godron Scholarship Fund: This unrestricted endowed fund was established in 1977 to assist worthy male students who demonstrate a need for financial assistance.

Federal Scholarship for First-Year Students of Exceptional Financial Need: The Health Professions Educational Assistance Act of 1976 authorized "Scholarships for First-Year Students of Exceptional Financial Need." This scholarship program provides for the payment of tuition and fees, all other reasonable educational expenses and a monthly stipend for a 12 month period. Students receiving "exceptional need" scholarships for their first year of study are given priority consideration for National Health Service Corps Scholarships for their second year of study.

Other students may participate in scholarship programs under the National Health Service Corps and the Armed Forces where participants are required to perform obligated service on a year-for-year basis with a minimum of two years.

Graham Hunter Scottish-American Exchange Scholarship, is awarded annually to a fourth-year student for the purpose of studying at the University of Dundee, Scotland, and for a Scottish medical student to study at the University of Florida College of Medicine. This exchange program was made possible through funds provided by the late Mr. George Graham Guthrie Hunter.

Medizinische Hochschule Hannover-American Exchange Scholarship, is awarded annually to a fourth-year student for the purpose of studying at the University of Hannover, West Germany, and for German medical students to study at the University of Florida College of Medicine. This exchange program was made possible through funds of the DAAD (German Academic Exchange Service).

The George Graham Hunter Scholarship Fund, is awarded each year to an undergraduate medical student in the field of orthopaedics. The recipient of this scholarship shall be designated by the orthopaedic faculty and approved by the dean of the College of Medicine.

C. J. Miller Scholarship is an endowed fund whose purpose is to support a junior or senior medical student in good academic standing who is in need of financial assistance.

The Nell C. Miller Scholarship is an endowed fund established in 1982 under the terms of the will of Mrs. Miller to provide partial scholarships for medical students interested in cardiovascular physiology or diseases, or related problems.

Avonelle C. Noah Scholarship Fund: An endowment fund was established in 1968 under the terms of the will of Mrs. Avonelle C. Noah. The income from this fund is to be used to assist worthy students in the College of Medicine.

Susan O. Rasmussen Scholarship provides financial assistance to students from central Florida who are enrolled in the College of Medicine and have financial need.

Lettie Pate Whitehead Scholarship: This annual scholarship is awarded to worthy female students in financial need from the states of Virginia, North Carolina, South Carolina, Tennessee, Georgia, Florida, Alabama, Mississippi or Louisiana.

Wheat Medical Scholarship Fund: An endowment fund was established in 1967 under the terms of the will of Mrs. Eva H. Wheat. The income from this fund is to be used to assist worthy male medical students (who are selected by the College of Medicine) to continue their education.

William Warren and Marie C. Wolff Scholarship is awarded to needy, worthy, and talented young men and women who are accepted by the College of Medicine, who are dedicated to the science of medicine, and who otherwise could not receive such education.

County Scholarships: Various counties in Florida, such as Broward, Lee and Palm Beach, have established scholarship awards to residents who attend the University of Florida College of Medicine.

SCHOLASTIC AWARDS

Alpha Omega Alpha Honor Medical Society: The Beta Chapter of Florida was installed at the University of Florida College of Medicine on May 9, 1960. A small number of students of the junior and senior classes are eligible for membership. Selection is based upon high academic standing, personal and professional character, and promise for future contributions to medicine.

The John Gorrie Award, donated by Dr. Theodore F. Hahn, Jr., is presented each year to the graduating medical student who, in the opinion of the faculty of the College of Medicine, is the best all-around student showing promise of becoming a practitioner of the highest type.

Upjohn Achievement Award is offered through the Upjohn Company Achievement Award program to the graduating medical student who achieves the highest academic standing during the four years in medical school.

The William C. Thomas, Sr. Award is given each year to an outstanding student with an interest in obstetrics and gynecology. The award is made by the Florida Obstetric and Gynecologic Society.

The Faculty Award for Research is given to the graduating medical student who has made the most outstanding contribution through research during the course of medical school.

Alumni Scholarship Award was established by the University of Florida Medical Alumni Association from donations by its members and is awarded at the end of the junior year to a student who is judged to be outstanding scholastically.

Bythewood & Baker Memorial Scholarship Award for Women Medical Students is an endowed fund established in 1968 by Miss Martha Isabel Mays and is awarded to a junior female medical student who is judged to be academically outstanding.

The Luther W. Holloway Award was established by the Florida Pediatric Society in honor of the late Dr. Luther W. Holloway to be awarded to the medical student showing the greatest proficiency in child health.

The Hugh and Cornelia Carithers Award, an endowed award established by Drs. Hugh and Cornelia Carithers of Jacksonville, is presented each year to a graduating student on the basis of overall accomplishments and aptitudes in child health and human development.

The University Medical Guild Scholarship Awards are presented each year by the University Medical Guild to a medical student who, at the end of his/her third year, is judged to be outstanding scholastically and to an entering student on the basis of need and scholastic merit.

The University of Florida Medical Guild Award in Memory of Mrs. J. Hillis Miller is given annually to a first-year student in recognition of outstanding academic achievement during the first year of medical school.

The University Medical Guild Graduate Research Awards are presented each year to three graduate students in the basic medical sciences who are judged to have performed the best research during their graduate studies.

Genevra Todd and Henry E. Meleney Memorial Award, established originally by the late Dr. Henry E. Meleney in memory of his wife, is to be given to a medical student for outstanding achievement during the first year of medical study.

The Watson Clinic Award is to be presented each year by the Watson Clinic of Lakeland to the medical student chosen for productive effort and scientific contribution. The research must have been presented at a Medical Student Research Conference during the academic year.

The Dean Mitchell Baker Award, established by Dr. and Mrs. Roy M. Baker of Jacksonville in memory of their son, is awarded each year to the graduating medical student for excellence in the field of pediatric cardiology.

Joel Cohen, Patricia Ann Maddalone Memorial Award was established in memory of Joel Cohen who demonstrated superior skill, imagination and industry in the laboratory research of drug hypersensitivity, and is to be presented each year to that student demonstrating outstanding proficiency in clinical or laboratory investigation in the field of immunology.

Most Noble Order of the Flea Award is donated by this organization, composed of past and present chairmen of the Department of Medicine, chiefs of the Medical Service at the Veterans Administration Medical Center and chief residents in medicine, to the graduating medical student who has demonstrated outstanding proficiency and excellence in the field of internal medicine.

W. F. Enneking Award, established and funded by the Musculoskeletal Oncology Fellows of the Department of Orthopaedics, is to be given annually to the graduating medical student who, in the opinion of the faculty of the orthopaedic department, shows the most promise of making a contribution to medicine through an academic career.

Guillermo J. Perez Memorial Scholarship Award was established by the Department of Pediatrics in memory of the late Dr. Perez, a former member of the pediatric faculty, to support each year the training of a graduating medical student who demonstrated an interest in adolescent medicine.

Walt Oppelt Memorial Award has been established in memory of the late Dr. W. Walter Oppelt by friends, associates, and the Departments of Pharmacology and Therapeutics and Medicine. This annual award will be presented to a graduating medical student who has excelled in the field of pharmacology and therapeutics throughout the four years.

Paula Ellis Scholarship Award was established by the Gainesville Junior Women's Club as a memorial to Paula Ellis and is given to a medical student chosen for academic excellence and/or meritorious service who shows promise and interest in the prevention or cure of cancer.

F. Eugene Tubbs, M.D., J.D., Memorial Award was established in 1979 in memory of the late Dr. Tubbs, a former resident physician in the College of Medicine and member of the Florida House of Representatives. The award is to be awarded jointly each year to a University of Florida medical student and a Florida State University law student who have demonstrated excellence in their field.

Charles Collins Obstetrical and Gynecological Award was established in 1975 by the Florida Obstetrical and Gynecological Society to honor Dr. Charles Collins of Orlando. This award is given each year on a rotating basis to a graduating medical student in one of the three medical schools in the state who has shown academic excellence and outstanding performance in the field of obstetrics and gynecology.

Netter Atlas Award, sponsored by Ciba Pharmaceutical Company, is given each year in recognition of a medical student who has contributed the most to community service.

Sandoz Award established by Sandoz Pharmaceuticals, is presented annually to a medical student in recognition of superior academic achievement and contribution to health care.

Book Awards consisting of presentations each year to outstanding members of the four classes in the College of Medicine, are made by Lange Medical Publications and C.V. Mosby Company.

Roger G. Schnell Neurology Book Award, established by Dr. Roger G. Schnell of Ft. Lauderdale, is to be given to a medical student who has shown excellence in the field of clinical neurology.

Paul R. Elliott Award, established by the Program in Medical Sciences, is given annually to the graduating physician whose performance and career aspirations best reflect the ideals and program goals as set forth by Paul R. Elliott to provide excellence in primary care.

The Professor James M. Murdock Therapeutics Award recognizes a senior medical student's outstanding knowledge and excellence in the field of therapeutics.

The Gainesville Medical Group Internal Medicine Scholarship Award is to be presented annually to a rising senior medical student in recognition of academic achievement and excellence in the field of medicine.

Lester-Bennett Award is to be given annually by Dr. Jean Bennett of Clearwater, in honor of her parents, in recognition of an awareness of the need to be involved in community affairs and service through medicine.

Class of 1980 Donegan Scholarship Award was established for peer recognition of academic excellence, personal integrity and financial need of a rising senior medical student and to honor Miss Hazel Donegan of the Office of Student Admissions and Activities, College of Medicine.

Samuel D. Harris Scholarship Award was established by Mr. George Harris of St. Augustine, in honor of his brother, to recognize senior medical students who have shown proficiency in psychiatry and geriatrics.

Plastic and Reconstructive Surgery Award is offered by this department to recognize that senior medical student who has shown academic achievement and excellence in the field of plastic and reconstructive surgery.

H. Lucas-Bennett Award, established by Dr. Jean Bennett in memory of her grandfather, Mr. Hendrix Lucas, is awarded annually to a graduating senior to recognize overall excellence in the area of pediatric pulmonary medicine.

J. Norman Hobbs Award is given annually by Mrs. J. Norman Hobbs in memory of her husband to a graduating senior in recognition of community involvement, high academic and moral standards and interest in advancing knowledge of childhood cancer.

Eugene Craig Haufler Pediatric Award acknowledges a graduating senior who has demonstrated outstanding excellence and has a career goal in pediatrics.

W. Lucas-Bennett Award is to be given annually to that senior student who has shown expertise in the area of pediatric infectious disease.

LOAN FUNDS

College of Medicine Loan Funds: Loans from these funds are available to students enrolled in the College of Medicine who are in good academic standing and can show sufficient evidence of financial need. Interest (at nine percent) begins at graduation and continues until repayment is completed. Repayment ordinarily begins one year after graduation. Short-term loans are available for emergencies, but must be repaid within the semester borrowed.

These funds have been made possible by grants from the W. K. Kellogg Foundation; the Selby Foundation; the Patrick J. O'Shaughnessy Memorial Fund; the John J. Tigert Memorial Fund; the Frederick F. Kumm, M.D., Memorial Loan Fund; the Helen Stargardt Memorial Loan Fund; the George M. Green, M.D., Memorial Loan Fund; the Algia Collins, Jr., M.D., Memorial Fund; the Publix Scholarship Loan Fund; Alachua County Medical Auxiliary; and by gifts from several organizations and individuals within the State of Florida. Loans are administered by the College of Medicine's faculty-comprised Loan Committee.

Health Professions Educational Assistance Act: The Health Professions Educational Assistance Act of 1976 extends the act of 1963 through 1980 and provides student loans up to the cost of tuition and $2,500 in one academic year. The loans are based on exceptional financial need and may be repaid in part by service in a shortage area. Interest rates are nine percent per annum.

Ronald A. Julian Memorial Fund was established as a memorial loan fund to assist medical students in financing their education. It is administered in accordance with the procedures established for the College of Medicine Loan Fund.

The Barbara S. Michael Loan Fund: A revolving loan fund established in 1977 for needy and worthy students in the College of Medicine.

Bernard J. Wagner Loan Fund: Established in 1968, this trust fund is for the purpose of assisting students of accredited medical schools to continue with their education. Preference shall be given to those who have completed the most years in medical school. Loans are repayable with interest at a rate never to exceed that prevailing rate at the time the loan is made on student loans enacted by Congress.

University of Florida College of Medicine Alumni Association Loan: This loan was established by the members of the college's Alumni Association from donations by its members and awarded to worthy students in financial need.

Hugh and Mable Wilford Loan Fund: This trust fund was established in 1970 for the purpose of making loans available to assist worthy and needy students to attend the University of Florida College of Medicine. This loan fund will be administered in accordance with procedures established for the Health Professions Student Loan Program.

Marie Rosa Valicenti Loan Fund: Established in memory of Mrs. Valicenti by the Carmen Valicenti Trust to provide loans for students from the northern part of Brevard County and to students from Orange County.

Dudley Beaumont Loan Fund: This fund was left to the College of Medicine early in the school's history as a memorial loan fund to assist in meeting the financial needs of its students. It is administered in accordance with the procedures established for the College of Medicine Loan Fund.

The George Graham Hunter Loan Fund: This trust fund, established in 1968, is for the purpose of making loans available to qualified medical students or residents in orthopaedics.

The Dr. P. Phillips Foundation Loan: This loan fund was established to assist financially needy students from Orange, Brevard, Seminole, Lake or Osceola counties who have shown academic achievement.

Guaranteed Student Loan Program: The Guaranteed Student Loan Program helps students meet the cost of education by allowing them to receive low-interest loans from participating commercial lending institutions such as banks, credit unions, and savings and loan associations. This program authorizes the guarantor, usually the state's Department of Education, to insure the lender for defaulted loans.

Each academic year, students may borrow an amount up to their expected cost of education minus financial aid received from other sources and minus their expected family contribution. Students from families with adjusted gross family incomes of $30,000 or less will have no family contribution expectation. For families earning more than $30,000 annually, the expected family contribution is determined by using a federally approved financial needs test. Graduate or professional students may request loans up to $5,000 an academic year. The total loans graduate students may accumulate may not exceed $25,000 including their undergraduate borrowing.

Seven percent interest is charged on loans that were taken out before January 1, 1981. Students who took out their first loan after 1980 are charged nine percent interest. For first-time borrowers taking out a loan in January 1984 or later, the interest rate is eight percent. Repayment of Guaranteed Student Loans begins six to nine months after the student ceases to be enrolled at least halftime. The interest on these loans is paid by the federal government while the student is enrolled at least halftime.

Additional information and applications can be obtained from the Office for Student Financial Affairs, 111 Anderson Hall, University of Florida, Gainesville, Florida 32611.

Other Sources: Many students have received financial support from local sources. These may be discovered by inquiries addressed to voluntary health agencies, medical organizations, service clubs, church organizations, or trust departments of banks.

FELLOWSHIPS

Student Research Fellowships: These fellowships are made possible by grants from voluntary health agencies in Florida, pharmaceutical firms, the National Institutes of Health, and other agencies. Medical student research holds a high priority in the College of Medicine with the primary objective being that of involving the inquisitive student in a self-learning experience in medical research. As an incentive to become involved in research, students are offered an opportunity to apply for fellowship support which is available on a part-time basis during the academic year and on a full-time basis during summer vacations. Fellowships are awarded on a competitive basis with a progress report and continuation application required for each semester. In addition to providing fellowships for research, this program also sponsors a conference series for medical students to report the findings of their research and will contribute funds (when available) to the travel expenses of medical students who are selected to present the results of their research at national conferences. On the basis of the results of the research projects and their presentation, medical students are eligible for the annual Faculty Research and Watson Clinic awards, and graduating students may also be considered for Graduation with Honors based on research.

LIVING ACCOMMODATIONS

Housing on campus should be arranged through the Office of the Director of Housing, University of Florida, Museum Road at S.W. 13th Street, Gainesville, Florida (392-2181). Beaty Towers has four-person suites at $588 per semester per student. For married students, apartments in Corry, Diamond, University Villages, and Tanglewood are available. These are modern two-story buildings of brick construction containing one, two, and a few three-bedroom apartments at $123-$234 per month (all prices subject to change). The 104 units comprising Schucht Memorial Village ($125-$186 per month) are adjacent to Shands Hospital and priority is given, when possible, to single housestaff and medical students who have clinical responsibilities requiring quick access to the Health Center. To secure favorable consideration, application for on-campus housing should be made immediately upon acceptance to the College of Medicine.

Private homes and privately operated rooming houses and apartments provide many accommodations for students. The university's Division of Housing also offers a referral service through the Off-Campus Housing Section where current listings are available. These listings are not compiled for mailing since they are subject to constant change, and mutually satisfactory rental arrangements can be made normally only by the student after a personal inspection of facilities and a conference with the landlord. Initial contacts should be made at least 30 days before school begins.

COURSE DESCRIPTIONS

PHASE A

The following courses comprise the basic medical science background (Phase A) of the curriculum for the M.D. degree, and are offered to medical and dental students during the first year. Many are available to graduate students in the university, although the number of students who can be accepted is limited by laboratory facilities.

BMS 5000 PRINCIPLES OF PHYSIOLOGY
6 credits. The basic physiology of the respiratory, cardiovascular, endocrine, renal and gastrointestinal systems is presented. Concepts of physiology are presented with some clinical applications.

BMS 5002 ASPECTS OF HUMAN BEHAVIOR
1 credit. This course offers a brief introduction to the complex biological, psychological and social interactions which underline human behavior in both health and illness. Against a background of normal development, problems of pain and chronic disease are used to demonstrate the psychosocial impact of illness.

BMS 5004 MEDICAL MICROBIOLOGY
2 credits. The course deals with the study of bacteria, fungi and parasites and the processes by which they produce infectious disease. Lectures, laboratory sessions and discussion groups are used to present course material.

BMS 5005 MEDICAL NEUROSCIENCE
5 credits. Designed to provide students with the fundamental information concerning the organization and function of the central nervous system, this neuroscience course is dedicated to an integrated and multidisciplinary approach to the central nervous system. It includes the study of neurohistology, neuroembryology, neurophysiology, neuroanatomy, neurochemistry, sensory and motor system organization and function. The laboratory component of the course is intensive providing students with an opportunity to develop a working knowledge of human brain structure and organization. There is a heavy emphasis on applying basic science information to realistic clinical problems.

BMS 5006 MEDICAL IMMUNOLOGY
2 credits. Designed to teach medical and dental students the fundamental principles of immunology. The course includes Patient Oriented Problem-Solving packages (POPS) that are designed to enable groups of students to work together applying the immunology facts and concepts learned to the solution of clinical problems.

BMS 5007 MEDICAL VIROLOGY
1-2 credits. This course is designed to teach the fundamental principles of medical virology to medical and dental students. Lecture and discussion groups are used in presenting information.

BMS 5100C GROSS ANATOMY
6 credits. The basic structure and mechanics of the human body are taught. Instructional settings include laboratory sessions, lectures, conferences and demonstrations. The practical application of clinical medicine is stressed throughout the course.

BMS 5110 MICROSCOPIC ANATOMY
4 credits. The microscopic structure of the cells, tissues and organs of the human body is taught. Correlation of structure and function is emphasized in lecture and in the laboratory sessions.

BMS 5121 HUMAN SYSTEMS DEVELOPMENT
2 credits. This lecture course covers early human development with emphasis on normal organogenesis and tissue morphogenesis. Some abnormal development is presented.

BMS 5201C BIOCHEMISTRY AND MOLECULAR BIOLOGY
5 credits. Lectures and discussion sessions are designed to increase the student's basic biochemical knowledge of cellular functions in health and disease including genetic disorders. The nutrition, physical chemistry, metabolism, and molecular biology of mammalian cells are stressed.

BMS 5202 MEDICAL ASPECTS OF HUMAN GENETICS
2 credits. Designed to familiarize the student with the medical aspects of human genetics, this course presents fundamental information in cytogenetics, Mendelian and multifactorial inheritance, and population genetics together with a review of its application in the diagnosis, management, and prevention of genetic diseases.

PHASE B

Phase B consists of preclinical and clinical portions. Day-to-day care of hospitalized patients is a responsibility in most clinical courses and requires highly specialized professional preparation as well as the commitment of large amounts of time by the students participating in the Phase B portion of the curriculum. Therefore, the clinical courses may be somewhat irregularly scheduled and limited to candidates for the M.D. degree. Small groups of students rotate through the individual clinical courses. These courses (clerkships) are integral parts of the curriculum and are offered for periods of approximately two months each.

BMS 5460 PHARMACOLOGY
4 credits. Introductory course presents concepts of drug action (drug-receptor interactions, drug absorption, distribution, and elimination), introduces most of the major classes of drugs, and emphasizes the biochemical and physiological basis for understanding drug action. Groups of drugs considered include anesthetic, autonomic, central nervous system, renal, cardiovascular and antimicrobial compounds.

BMS 5600 SYSTEMIC PATHOLOGY
8 credits. Prerequisites: Completion of first year of medical school. Functional and anatomical pathologic changes are correlated with etiology, pathogenesis and clinical manifestations of human disease.

BMS 5822 SOCIAL AND ETHICAL ISSUES IN MEDICAL PRACTICE
3 credits. An introduction for second-year medical students to a number of medical problems with social implications and human problems with clinical consequences which will provide them with some ways of thinking them through (anthropological, ethical, historical, philosophical, sociological). The course provides a forum for students to acquaint themselves with the reasoned views of others and to sharpen their own views on issues raised in the readings and video materials.

BMS 5830 PHYSICAL DIAGNOSIS AND INTRODUCTION TO CLINICAL MEDICINE
5 credits. Conducted by the Department of Medicine with participation by the Departments of Neurology, Orthopaedics, Ophthalmology, Obstetrics and Gynecology, Pediatrics, Otolaryngology and Urology. The student is introduced to the common and basic components of physical and laboratory examinations, techniques of interviewing and history taking, and care of the patient in all fields of medicine.

BCC 5151 DISORDERS OF THINKING, EMOTION AND BEHAVIOR
3 credits. This course enables the second-year medical students to improve interviewing techniques, to learn symptomatic psychopathology, to conduct comprehensive examinations and interrelate symptoms and to become familiar with descriptive and dynamic aspects of common clinical syndromes and diagnostic categories. Small group teaching is devoted to lecture-demonstrations and clinical work.

BCC 5100 ANESTHESIOLOGY CLERKSHIP
1 credit. One week. Intensive lectures and laboratory instruction in life support systems, including practice in the skills necessary to approach and treat the patient suffering from acute cardiopulmonary collapse of varying etiology.

BCC 5110 MEDICAL CLERKSHIP I
8 credits. Two months. Active participation in the care of ward and clinic patients is provided under supervision. Close tutorial relationship with staff in lectures, conferences, and teaching rounds provides a rich learning experience. A program in clinical therapeutics is conducted jointly with the Department of Pharmacology and Therapeutics.

BCC 5120 NEUROLOGY CLERKSHIP
3 credits. Two weeks. Participation on the inpatient and outpatient services of the Neurology Department at Shands Hospital, VA Medical Center and affiliated teaching services at regional centers. The student will learn how to evaluate the patient by assuming ongoing responsibility while appreciating various physiologic, chemical and pathologic aspects of neural function.

BCC 5130 OBSTETRICAL AND GYNECOLOGICAL CLERKSHIP
8 credits. Two months. Participation in obstetric and gynecologic management of women in Shands Hospital provides a learning experience with an appropriate degree of responsibility. The student focuses attention on the subject of biology and reproduction.

BCC 5140 PEDIATRIC CLERKSHIP
8 credits. Two months. Students actively participate in inpatient and outpatient medical and surgical management of infants and children. Teaching occurs in Pediatric Clinic, Emergency Room at Jacksonville's University Hospital and Shands Hospital, the latter serving as the major referral center for children in north and central Florida. Focus is upon diagnosis, management and consequences of illness in children and among their families.

BCC 5150 PSYCHIATRIC CLERKSHIP
8 credits. Two months. Observation and supervised treatment of psychiatric patients in Shands Hospital and VA Medical Center's inpatient, outpatient, and consultation services. Weekly didactic seminars, experience, and instruction are given in the application of this material to the practice of medicine.

BCC 5160 SURGICAL CLERKSHIP I
8 credits. Two months. Provides experience in the care of surgical patients in the ward and in the operating room. Instruction in surgical biology is provided by a series of daily seminars and lectures.

BCC 5170 COMMUNITY HEALTH CLERKSHIP
5 credits. Five weeks. A clinical rotation in which students participate in health care in various community settings. Experiences in urban and rural areas, or preceptorships with practicing physicians will be individually arranged. Whenever possible the student will live in the community so that it can be seen firsthand the medical and health problems as they exist in different communities as well as the success and shortcomings of present day medical care. The community health clerkship will be coordinated with the medicine and pediatric clerkship.

PHASE C

Within the general framework of Phase C, a student registers for 13 credit hours per semester of which 3-13 hours are chosen from Elected Topics and the balance from other offerings in the College of Medicine and the university. In addition, basic science review courses and one month advanced clerkships in medicine and surgery are required. The total curricular program must be approved by the College of Medicine prior to registration.

BMS 5465 ADVANCED PHARMACOLOGY
4 credits. One month. Lectures, conferences and laboratory. Fundamentals of drug action are studied with emphasis on cardiovascular, neurological, and endocrine systems. Joint teaching in basic aspects of appropriate clinical areas (e.g., anesthesia, ophthalmology) are conducted.

BMS 6310 INFECTIOUS DISEASES
3 credits. Pathogenesis of selected bacterial, viral, fungal and parasitic diseases, emphasizing the clinical and pathological aspects of human infections.

BMS 6501 PATHOPHYSIOLOGY
3 credits. Basic mechanisms of physiological function and their alteration by disease.

BCC 5111 MEDICAL CLERKSHIP II
4 credits. One month. Increased level of patient care responsibility over Phase B. Students serve as the primary physician under resident and faculty supervision. Students are responsible for the performance of simpler diagnostic procedures. Self-education is stressed, but students are encouraged to attend major departmental conferences.

BCC 5161 SURGICAL CLERKSHIP II
4 credits. One month. Students further develop skill in pre-operative evaluation, surgery, and postoperative care and follow-up. Twice weekly patient-oriented seminars are provided by faculty. The student will be an active member of the surgical team.

GMS 5930 ELECTED TOPICS I
3-13 credits. Offered by all medical science and clinical departments of the college as an opportunity for concentrated work in a field of particular interest to the student. Individual research, a preceptorship, or clinical clerkship in the college or in another medical center in this country or abroad may be elected.

GMS 5931 ELECTED TOPICS II
3-13 credits. Same as GMS 5930.

GMS 5932 SELECTED TOPICS I
8 credits. Same as GMS 5930.

GMS 5933 SELECTED TOPICS II
8 credits. Same as GMS 5930.

GMS 5934 SELECTED TOPICS III
4 credits. Same as GMS 5930.

GMS 5935 ELECTED TOPICS III
3-13 credits. Same as GMS 5930.

GMS 5936 ELECTED TOPICS IV
3-13 credits. Same as GMS 5930.

GMS 5937 ELECTED TOPICS V
3-13 credits. Same as GMS 5930.

GMS 5938 ELECTED TOPICS VI
3-13 credits. Same as GMS 5930.

GRADUATE COURSES IN THE MEDICAL SCIENCES

Programs leading to the Ph.D. and M.S. degrees in the medical sciences (with a major in anatomy, biochemistry and molecular biology, immunology and medical microbiology, neuroscience, pathology, pharmacology and therapeutics, or physiology) are offered by the College of Medicine. In addition, the M.S. and Ph.D. degrees in biochemistry are offered by the Department of Biochemistry and Molecular Biology. Training in these scientific disciplines is planned to give ex-

perience in research and teaching, rather than in clinical practice for which the M.D. degree program is designed.

Although no graduate major may be completed without adequate course work at the 6000 level or higher, the 5000 level courses listed for each individual department also are available for graduate credit as part of the candidate's major.

The following general courses are offered by each participating department. Most of these courses, as well as others listed below, are also available to qualified graduate students from other divisions of the university.

GMS 6905 RESEARCH IN MEDICAL SCIENCES
1 to 10 credits. May be repeated for credit. Supervised research other than that toward fulfillment of the thesis or dissertation research in Departments of Anatomy, Biochemistry and Molecular Biology, Immunology and Medical Microbiology, Neuroscience, Pathology, Pharmacology & Therapeutics and Physiology.

GMS 6910 INTRODUCTION TO SUPERVISED RESEARCH
1 to 5 credits. Credit not applicable toward degrees. May be repeated up to a total of 5 credits.

GMS 6940 INTRODUCTION TO SUPERVISED TEACHING
1 to 5 credits. Credit not applicable toward degrees. May be repeated up to a total of 5 credits.

GMS 6971 MASTER'S RESEARCH
1 to 15 credits. Anatomy, biochemistry and molecular biology, immunology and medical microbiology, neuroscience, pathology, pharmacology & therapeutics, and physiology.

GMS 7979 ADVANCED RESEARCH
1 to 9 credits. Anatomy, biochemistry and molecular biology, immunology and medical microbiology, neuroscience, pathology, pharmacology and therapeutics, and physiology.

GMS 7980 DOCTORAL RESEARCH
1 to 15 credits. Anatomy, biochemistry and molecular biology, immunology and medical microbiology, neuroscience, pathology, pharmacology & therapeutics, and physiology.

ANATOMY

The department offers programs leading to the Ph.D. and, in special cases, the M.S. degree in medical sciences. Areas of research and training include cellular, developmental and reproductive biology, and mammalian morphology. Prospective students should have a strong background in biology, and have taken undergraduate courses in inorganic chemistry, organic chemistry, calculus, and physics. Deficiencies can be made up during the first year of graduate study.

BMS 5100C GROSS ANATOMY
6 credits. The basic structure and mechanics of the human body are taught primarily in the laboratory but supplemented with lectures, conferences, and demonstrations, as needed.

BMS 5110C MICROSCOPIC ANATOMY
4 credits. The microscopic structure of the cells, tissues and organs of the human body is taught. Correlation of the structure and function is strongly emphasized. Fresh tissues are used when profitable and each student is issued a loan collection of prepared slides. Recent advances in knowledge of cellular structure, acquired by the use of the phase and electron microscopes, are included.

BMS 5121 HUMAN EMBRYOLOGY
2 credits. Lectures cover normal human development, organogenesis and tissue morphogenesis. Some abnormal development will be included.

BMS 5168C APPLIED GROSS ANATOMY
4 credits. A continuation in depth of BMS 5100 with emphasis on applied and correlative aspects.

BMS 5180 CELL AND TISSUE BIOLOGY
4 credits. Prerequisite: Cell biology, approval of staff. Cell specializations and interactions that account for the organization and functions of the basic tissues (epithelium, connective tissue, muscle and nerve).

BMS 5181 CELL DIFFERENTIATION, MORPHOGENESIS AND ONCOGENESIS
4 credits. Prerequisite: Comprehensive courses in developmental biology (or embryology), cell biology and biochemistry. Corequisite: molecular biology or consent of instructor. Course examines evidence for current models of cell differentiation, proliferation, shape change and motility, especially as the models relate to morphogenesis, pattern formation and oncogenesis. Format will consist of lectures prepared by instructors and students, followed by discussion. Readings will derive from original research literature.

BMS 6105 ADVANCED GROSS ANATOMY
2 to 4 credits; maximum 6. Prerequisite: Permission of instructor. Regional and specialized anatomy of the human body taught by laboratory dissection, conferences and demonstrations. May be repeated with change of content up to a maximum of 6 credits.

BMS 6150 ANATOMY SEMINAR
1 to 2 credits; maximum 12. Research reports and discussions of current research literature by departmental staff and graduate students. May be repeated with change of content up to a maximum of 12 credits.

BMS 6166C ADVANCED MICROSCOPIC ANATOMY
2 to 4 credits; maximum 6. Prerequisites: BMS 5110 or ZOO 5755, consent of instructor. Histological approaches and techniques relevant to selected research areas. Lectures, microscopic study and laboratory project relating structural and functional aspects of a problem. May be repeated for a maximum of 6 credits.

BMS 6176 SPECIAL TOPICS IN ANATOMY
1 to 4 credits; maximum 10. Readings in the recent literature of anatomy and allied disciplines. May be repeated with change of content up to a maximum of 10 credits.

BMS 6182C TECHNIQUES IN ELECTRON MICROSCOPY
2 to 4 credits. Prerequisites: courses and/or experience in histology and cytology. Theory and practice of electron micro-

scopic techniques including tissue preparation, sectioning, use of the electron microscope, and photography. Offered in even-numbered years.

BMS 6183C HISTOCHEMICAL AND CYTOCHEMICAL TECHNIQUES
2 credits. Prerequisite: Histology and staff approval. The theory and use of histochemical techniques will be presented with lecture and laboratory exercises.

BMS 6184C MORPHOLOGICAL AND BIOCHEMICAL TECHNIQUES
3 credits. Corequisite: Histology and staff approval. A survey of current techniques in cell biology, including tissue perfusion for scanning and transmission by electron microscopy, in vitro techniques, autoradiography and biochemical methods such as electrophoresis and radioimmunoassays.

BMS 6185 FERTILIZATION AND GAMETOGENESIS
2 credits. Prerequisites: BCH 4313 and 4203 or equivalent; a general course in developmental biology. Supervised study of publications in specific areas of reproductive biology, including oogenesis, spermatogenesis and fertilization. Weekly conferences, reports, lectures.

BMS 6905 INDIVIDUAL STUDY
1 to 3 credits; maximum 8. Supervised study in areas not covered by other graduate courses.

GMS 6971 RESEARCH FOR MASTER'S THESIS
1 to 15 credits.

GMS 7979 ADVANCED RESEARCH
1 to 9 credits.

GMS 7980 RESEARCH FOR DOCTORAL DISSERTATION
1 to 15 credits.

BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Department of Biochemistry and Molecular Biology offers the Master of Science and Doctor of Philosophy degrees in biochemistry with specialization in physical biochemistry, molecular biology, cell biology, and medical biochemistry. The department, as one of the basic medical sciences, also offers these subjects as part of the program leading to the M.S. and Ph.D. in medical sciences.

Specific areas of study include structure and function of cellular and nuclear membranes in mammalian cells; transport of molecules into the cell; regulation of cell division and gene expression; biochemistry of differentiation; biochemical genetics; molecular biology of nucleic acids; replication and repair in bacterial and eukaryotic cells; biosynthesis and structure of nucleic acids, proteins, polysaccharides, lipids, lipoproteins, isoprenoid metabolism; physical biochemistry of nucleic acids and proteins; mechanism of enzyme action; and marine biochemistry.

New graduate students should have adequate training in general, organic, quantitative, and physical chemistry as well as in physics, biology, and calculus. Minor deficiencies may be made up immediately after entering Graduate School.

Doctoral candidates are required to take a core of biochemistry courses which include BCH 6065, 6156, 6206, 6415, 6876 and 6936. Depending upon interests and background of the student, additional courses are recommended from the following list: BCH 6296, 6746, 7077 and 7257. The course of graduate study for doctoral candidates also includes advanced organic and physical chemistry, physiology, microbiology and genetics.

BCH 6065 ADVANCED PHYSICAL BIOCHEMISTRY
3 credits. Prerequisites: General biochemistry and calculus or consent of instructor. Corequisite: Physical chemistry. Physical chemistry of biological molecules and the techniques for their study. Constitutes one of the three core biochemistry courses.

BCH 6156C RESEARCH METHODS IN BIOCHEMISTRY
1-4 credits. Corequisites: BCH 6065, 6206, 6415. Only by special arrangement. Biochemical research in which the student refines his research techniques in physical biochemistry, intermediary metabolism, molecular biology, and cell biology under supervision of a staff member. May be repeated for a maximum of 8 credits. S/U.

BCH 6206 ADVANCED METABOLISM
3 credits. Prerequisites: General biochemistry or consent of instructor. The reactions of intermediary metabolism with emphasis upon their integration, mechanism, and control. Constitutes one of the three core biochemistry courses.

BCH 6296 ADVANCED TOPICS IN METABOLIC CONTROL
1 credit. Prerequisites: BCH 6065, 6206, 6415, or consent of instructor. Study of the thermodynamic, allosteric, endocrinologic, and genetic control of metabolic reactions.

BCH 6415 ADVANCED MOLECULAR AND CELL BIOLOGY
3 credits. Prerequisite: General biochemistry or consent of instructor. An advanced course combining the molecular biology of pro- and eukaryotes with cell biology. Topics will include DNA replication, chromosome organization; RNA and protein synthesis; as well as the biochemistry of cell organelles. Constitutes one of the three core biochemistry courses.

BCH 6746 ADVANCED TOPICS IN PHYSICAL BIOCHEMISTRY
1 credit. Prerequisites: BCH 6065, 6206, 6415, or consent of instructor. Study of the physical chemistry ol proteins, nucleic acids, lipids, enzymes, as well as their modes of interaction.

BCH 6876 RECENT ADVANCES IN BIOCHEMISTRY
1 credit. Prerequisite: BCH 6065 or equivalent. Areas of biochemistry and molecular biology, selected by the faculty, discussed critically and in depth. Emphasis on current controversy and theory, data interpretations, and scientific writing. Classes held informally in small groups during each semester, involving all biochemistry faculty on a rotating basis. S/U.

BCH 6910 SUPERVISED RESEARCH
1-5 credits; maximum 12. Prerequisite: Consent of instructor. Nonthesis, individually supervised research. May be repeated for a maximum of 12 credits. S/U.

BCH 6936 BIOCHEMISTRY SEMINAR
1 credit. Required of graduate students in biochemistry; open to others by special arrangement. Research reports and discussions of current research literature given by the departmental staff, invited speakers, and graduate students. S/U.

BCH 6940 SUPERVISED TEACHING
1-5 credits; maximum 12. Prerequisite: Consent of instructor. Teaching and conducting of discussions under direct supervision. May be repeated for a maximum of 12 credits. S/U.

BCH 6971 RESEARCH FOR MASTER'S THESIS
1 to 15 credits.

BCH 7077 ADVANCED TOPICS IN MOLECULAR BIOLOGY
1 credit. Prerequisites: BCH 6065, 6206, 6415, or consent of instructor. The biochemical basis of molecular biology and genetics with emphasis on the mode of control surrounding the replication and expression of the pro- and eukaryotic genome.

BCH 7257 ADVANCED TOPICS IN CELL BIOLOGY
1 credit. Prerequisite: BCH 6415 or eqnivalent. Biochemistry of selected cell organelles with emphasis on compartmentation and integrated cellular function.

BCH 7515 ENZYME KINETICS AND MECHANISMS
2 credits. Prerequisite: Advanced general course in biochemistry such as BCH 6065, 6206 or consent of instructor. The study of enzyme reaction mechanisms using kinetics, spectroscopy, protein crystallography and new emerging techniques.

BCH 7627 BIOCHEMISTRY OF DISEASE
2 credits. Prerequisite: General courses in biochemistry. The molecular basis of human pathobiology. Biochemical mechanisms underlying selected disease states.

BCH 7979 ADVANCED RESEARCH
1 to 9 credits. S/U.

BCH 7980 RESEARCH FOR DOCTORAL DISSERTATION
1 to 15 credits. S/U.

PCB 6401 MOLECULAR BIOLOGY AND FUNCTION OF CELL MEMBRANES
2 credits. Prerequisite: BCH 4203, BCH 4313 and MCB 3020 or equivalents and consent of instructor. Composition, molecular organization, and assembly of biological membranes in both eucaryotes and procaryotes.

IMMUNOLOGY AND MEDICAL MICROBIOLOGY

The department offers a program leading to the Ph.D. and M.S. degrees in medical sciences with specialization in immunology and medical microbiology, including the fields of molecular biology, parasitology, and virology. Through individual planning of course work, research and teaching, the graduate student is offered an educational atmosphere in which to develop skills and gain intellectual independence and initiative. The program is closely related to that of the Department of Microbiology in the College of Agriculture.

The undergraduate preparation for graduate study in immunology and medical microbiology should be wide in scope and should include general biology, physics, chemistry (2 to 3 years including organic and quantitative analysis) with statistics, calculus, physical chemistry, genetics, and bacteriology recommended. A bachelor's degree in bacteriology or microbiology is not required. In Graduate School, the student will first obtain a general background in microbiology as preparation for research and teaching. The remaining course work should be arranged according to the student's interests and competence. Specialization in the following areas is offered: virology, immunology, immunochemistry, cellular immunology, infectious diseases, molecular genetics and parasitology.

BMS 5301 MEDICAL PARASITOLOGY
2 credits. Introduction to the major groups of animal parasites infecting man with special emphasis on life history, epidemiology, and laboratory diagnosis.

BMS 6305 PARASITIC DISEASE OF THE TROPICS AND SUBTROPICS
3 credits. Animal parasitology covering the mechanisms of parasitic infections, the physiology of parasites and the immune responses of the host; public health, veterinary and general aspects of various parasites affecting man and animals. Laboratory work includes experiments showing the effects of nutrition of parasites; immune responses, factors and modes of transmission; life cycles; morphology.

BMS 6310 INFECTIOUS DISEASES
3 credits. Pathogenesis of selected bacterial, viral, fungal and parasitic diseases, emphasizing the clinical and pathological aspects of human infections.

BMS 6314 PRINCIPLES OF IMMUNOLOGY
3 to 5 credits. Biological and biochemical aspects of host resistance and immunity, with special emphasis on the chemical and physiochemical properties of the proteins and immune reactions.

BMS 6321 SPECIAL TOPICS IN MICROBIOLOGY
1 to 6 credits; maximum 18. Contemporary research in a particular aspect of general microbiology. May be repeated with change of content for a maximum of 18 credits.

BMS 6330 VIROLOGY
3 credits. Natural history of viruses and mechanisms of viral replication.

BMS 6352 MOLECULAR GENETICS
2 to 5 credits. Microbial genetics, including mutation, selection, transformation, transduction, conjugation and episomal factors, molecular structure and function of genes.

BMS 6360 EXPERIMENTAL MICROBIOLOGY
2 to 5 credits; maximum 8. Application of physical, chemical and biological techniques to experimental problems in microbiology. Individual laboratory study under supervision. May be repeated with change of content up to maximum of 8 credits.

BMS 6930 SEMINAR
1 credit. Attendance is required of all graduate majors at one research presentation and one graduate report each week as scheduled. May be repeated with change of content. S/U.

BMS 7931 RESEARCH CONFERENCE
1 credit. Critical discussion and appraisal of research programs of the faculty and students of the department. May be repeated with change of content. S/U.

BMS 7932 JOURNAL COLLOQUY
1 credit. Critical presentations and discussion of recent original articles in the microbiological literature. May be repeated with change of content.

NEUROSCIENCE

The department offers programs leading to the Ph.D. and M.S. degrees in medical sciences with specialization in the basic neural and neurobehavioral sciences. While there are no fixed entrance prerequisites, prospective students should obtain a reasonable undergraduate background in biochemistry, physiology, statistics and behavioral science. Students admitted with deficiencies in these areas will be required to obtain remedial training. All students will receive core training in neuroanatomy, neurophysiology, neurobehavioral science, neurochemistry, neuroendocrinology, neurohistology, and neuropharmacology. The remainder of the program will consist of laboratory research and advanced courses and seminars from this and other departments.

BMS 5511 VISION
3 credits. Prerequisite: Consent of instructor. The visual process and supporting systems approached from the orientation of human vision.

BMS 6131C NEUROHISTOLOGY
2 credits. Histological approaches and techniques for the study of the neuronal, neuroglial and mesenchymal cellular components of the central and peripheral nervous system. S/U.

BMS 6510 NEUROPHYSIOLOGY
3 credits. Physiology of nerve and muscle, central nervous system and the special senses.

BMS 6512 A SURVEY OF SENSORY SYSTEMS
3 credits. Prerequisite BMS 6510 or equivalent. A group of specialists provide a survey of theories and experimental data on human and subhuman sensory reception and encoding. Auditory, visual, cutaneous and chemical senses are included.

BMS 6514 SEMINAR IN SENSORY PROCESSES
1 credit. Topics of current interest in various areas of the sensory specialties are discussed within the seminar framework. S/U.

BMS 6531 PHYSIOLOGY OF THE CENTRAL NERVOUS SYSTEM
3 credits. Special and current problems in brain and spinal cord function covered in seminars.

BMS 6532 NERVE AS A TISSUE
2 credits. Seminar on current research problems in the area of cellular interactions in the nervous system. Readings and discussion from articles in the fields contributing to the physiology, chemistry and anatomy of the nervous system.

BMS 7142C MEDICAL NEUROSCIENCE
4 credits. A comprehensive overview of human neuroanatomy from the subcellular to the gross tissue level. Lectures will also cover neurochemistry, neuropharmacology, neurophysiology, neuroendocrinology and neurobehavioral biology. Clinical correlations and applications will be given.

BMS 7143C STRUCTURE AND FUNCTION OF THE AUDITORY SYSTEM
3 to 5 credits. Prerequisite: BMS 7142C or consent of instructor. Laboratory seminar on the anatomy and physiology of the auditory system. Stress on brainstem nuclei and their interconnections.

BMS 7165C RECENT ADVANCES IN NEUROSCIENCE
1 to 2 credits; maximum 16. Prerequisite: Consent of instructor. Seminar and group discussions of recent advances in one or more areas of neuroscience. These areas include neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroendocrinology and neurobehavioral biology. May be repeated up to a maximum of 16 credits.

BMS 7467 PHYSIOLOGY AND PHARMACOLOGY OF EXCITABLE MEMBRANES
2 credits. Membrane ionic permeability changes underlying action and synaptic potential generation. Application of electrophysiological and radioactive tracer techniques to the analysis of drug action on excitable membranes. Offered jointly by the Departments of Pharmacology and Therapeutics and Physiology.

BMS 7513 PHYSIOLOGICAL BASIS OF BRAIN RHYTHM
2 credits. An analysis of the structural, physiological and pharmacological substrates for electrical activity of the central nervous system as manifested in the normal electroencephalogram including the development and relationship to evoked potentials.

BMS 7533 COLLOQUIUM IN NEUROBIOLOGY
1 to 2 credits; maximum 12. Prerequisite: Consent of instructor. Current theoretical issues that relate to the neurophysiological, physiological, chemical and behavioral approaches to the study of the nervous system. May be repeated with change of content up to a maximum of 12 credits. S/U.

GMS 5702 NEUROHUMORS AND BEHAVIOR
3 credits. Prerequisite: Consent of instructor. Actions of putative neurotransmitters and neuromodulators and drugs on animal behavior. The localization, metabolism, storage, release and physiological action of each group of neurotransmitters will also be reviewed.

GMS 6700 HISTORY OF THE NEUROSCIENCES
2 credits. Prerequisite: Consent of instructor. History of the discoveries, concepts and technical advances in the nervous system disciplines from ancient to modern times. The emergence of the several neurosciences as experimental disciplines that provide a foundation for rational medical applications.

GMS 6701 COMPARATIVE NEUROANATOMY AND NEUROPHYSIOLOGY
1 to 3 credits. Prerequisite: BMS 7142C or equivalent. The phylogenetic development of the central nervous system of vertebrate animals considered from the behavioral, anatomical and electro-physiological points of view. S/U.

GMS 6703 PAIN AND SOMESTHESIS
3 credits. Current research on central nervous system coding and information transfer, using somesthesis as a model with particular emphasis on pain.

GMS 6710 NEUROBIOLOGY
3 credits. Prerequisite: Background in biological or behavioral sciences. Structure and physiology of the nervous system as it pertains to control of behavior.

GMS 6732 NEUROENDOCRINOLOGY
2 to 4 credits. Prerequisite: Permission of instructor. Neural regulations of endocrine systems in vertebrate animals. Correlative study of neuroanatomical, neurophysiological and neurochemical aspects of endocrine control.

GMS 6735 NEUROPHARMACOLOGY
3 credits. Prerequisite: Background in biochemistry and basic neuroscience or consent of instructor. The identification, synthesis, metabolism, and pharmacology of neurotransmitters and their receptors, to include biogenic amines, neuropeptides, and other nervous system transmitters.

GMS 7711 BEHAVIORAL NEUROENDOCRINOLOGY
3 credits. Prerequisite: Consent of instructor. Interrelationships of endocrine hormones, nervous system activity, and behavior. Sample topics include the role of hormones in sexual behavior, aggression, stress, parental behavior, learning and memory, mood and target organ physiology.

GMS 7712 NEUROBEHAVIORAL RELATIONS
3 credits. Prerequisite: BMS 7142C or consent of instructor. Theories and data on the central nervous system basis of higher order function. Emphasis will be on arousal, purposeful behavior and learning.

GMS 7713 INFORMATION STORAGE: A NEUROBIOLOGICAL APPROACH
3 credits. Prerequisite: BMS 7142C or consent of instructor. Consideration of data dealing with basic issues concerning the nature and behavioral plasticity and information storage and their central nervous system foundations. Particular emphasis will be paid to memory disruption and facilitation as an experimental tool in the study of memory processes.

GMS 7714 NEUROENDOCRINOLOGY
3 credits. Interrelationships and roles of endocrine hormones, behavior and nervous system activity during the perinatal period on the development of adult patterns of neuroendocrine activity and behavior.

GMS 7715 INTEGRATIVE NEUROBIOLOGY IV: BEHAVIORAL NEUROBIOLOGY
4 credits. Lecture and laboratory course concerning the neurobiological substrates of behavior, and neurobehavioral techniques.

GMS 7720 MOTOR SYSTEMS
3 credits. Prerequisite: Consent of instructor. A study of the basic mechanisms involved in motor activity including a detailed analysis of the muscle spindle and its central control by spinal cord and supraspinal mechanisms. Emphasis is on normal rather than abnormal processes.

GMS 7721 NEURAL MECHANISMS OF INGESTION AND ENERGY REGULATION
2 to 3 credits. Identical with PSB 7719. Neuroanatomical, neurobehavioral and neuroendocrinological mechanisms involved in the regulation of food and water consumption and regulation of body weight.

GMS 7730 FUNCTIONAL NEUROCHEMISTRY
1 to 3 credits. Prerequisite: Biochemistry. A survey of molecules that play a special role in nervous system function or respond to neural stimulation. Included will be studies of nucleic acids, proteins, glycoproteins, glycolipids, phospholipids, cyclic nucleotides and neurotransmitters and the enzymes associated with their metabolism. Results from simple systems will be related to those of higher brain function.

GMS 7731 MOLECULAR NEUROBIOLOGY
3 credits. Function of biochemicals in nervous tissue. Includes the function and metabolism of neurotransmitters and other neurohumors, the structure and properties of membranes, metabolism and function of macromolecules, axoplasmic transport and the development of nervous systems.

GMS 7733 INTEGRATIVE NEUROBIOLOGY I: CELLULAR AND MOLECULAR NEUROBIOLOGY
4 credits. Cellular and subcellular structure of nervous tissue. Development of the nervous system and factors involved in its differentiation. Nervous system biochemistry including metabolism and function of neurotransmitters. Axoplasmic transport. Degeneration and regeneration and trophic functions of nervous tissue.

GMS 7740 NEUROSCIENCE SEMINAR
1 credit; maximum 12. Prerequisite: Permission of instructor. Reading and discussion of current topics in neuroscience. May be repeated with change of content up to a maximum of 12 credits. S/U.

GMS 7741 SPECIAL TOPICS IN NEUROSCIENCE
1 to 4 credits; maximum 12. Prerequisite: Permission of instructor. Intensive reading and lectures in specialized fields of neuroscience and allied disciplines. May be repeated with change of content up to a maximum of 12 credits.

GMS 7742 RESEARCH METHODS IN NEUROSCIENCE
1 to 7 credits; maximum 12. Prerequisite: Permission of instructor. Research techniques in neurohistory, neurophysiology, neuroendocrinology, neurochemistry, neuropharmacology, neurobehavioral science, experimental neurology, neuroscience instrumentation or electron microscopy under supervision of a staff member. May be repeated with change of content up to a maximum of 12 credits.

GMS 7743 DEVELOPMENTAL NEUROBIOLOGY
3 credits. Seminar on the neuroanatomical and functional development of the nervous system. Includes discussion of mechanisms of embryonic neurogenesis, behavioral embryology, and current research in neuroembryology.

GMS 7750 INTEGRATIVE NEUROBIOLOGY II: COMPARATIVE NEUROANATOMY
2 to 3 credits. Lecture and laboratory course concerning general principles of vertebrate neuroanatomy and brain and spinal cord organization. Mammalian neuroanatomy stressed.

GMS 7760 INTEGRATIVE NEUROBIOLOGY III: SYSTEMS NEUROBIOLOGY
4 to 6 credits. Lecture course concerning neurobiological systems; specifically the motor systems, nonspecific systems, sensory systems, and neurotransmitter-neuroendocrine systems.

PATHOLOGY

The Department of Pathology, College of Medicine, in association with the Department of Comparative and Experimental Pathology, College of Veterinary Medicine, offers a program leading to the Doctor of Philosophy degree in medical sciences, specializing in experimental pathology and immunology. Students can elect to carry out their dissertation research in either the Department of Pathology or the Department of Comparative and Experimental Pathology under the direction of a faculty member with a graduate faculty appointment. Areas of research within this program include cellular and molecular immunology, immunogenetics, immunochemistry, immunopathology, immunology of infectious diseases, tumor biology and virology, membrane biochemistry, molecular biology and comparative and nutritional pathology.

The Department of Pathology also offers a program leading to the Master of Science degree in medical sciences, specializing in clinical chemistry, clinical immunology or clinical virology.

The program in experimental pathology and immunology emphasizes basic research while programs in clinical chemistry, clinical immunology, and clinical virology emphasize laboratory

training for management and supervision of clinical laboratories. Careers in pathology offer a diversity of opportunities: service in diagnostic laboratories, basic research in immunology, pathology or genetic engineering, and teaching.

Graduate students entering the experimental pathology and immunology program should have adequate undergraduate training in chemistry, biology, physics and mathematics, with special emphasis on physiological, developmental and cellular biology. Flexibility in the graduate program of the Departments of Pathology and Comparative and Experimental Pathology permits the student's course curriculum to be arranged according to his/her specific interests and needs. A blending of basic research with clinical application provides a unique educational atmosphere for the student to gain intellectual independence while developing basic as well as applied research skills.

Program in Experimental Pathology and Immunobiology

BMS 5181 CELL DIFFERENTIATION MORPHOGENESIS AND ONCOGENESIS
4 credits. Prerequisite: Comprehensive courses in developmental biology (or embryology), cell biology and biochemistry. Corequisite: molecular biology or consent of instructor. Course examines evidence for current models of cell differentiation, proliferation, shape change and motility, especially as the models relate to morphogenesis pattern formation and students, followed by discussion. Readings will derive from original research literature.

BMS 6314 PRINCIPLES OF IMMUNOLOGY
5 credits. Biological and biochemical aspects of host resistance and immunity; the chemical and physiochemical properties of the proteins of immune reactions.

BMS 6601 SPECIAL SUBJECTS IN SYSTEMIC PATHOLOGY
1 to 3 credits. Prerequisite: Staff approval. Pathological processes affecting specific organs and organ systems.

BMS 6603 GENERAL PATHOBIOLOGY AND LABORATORY
4 credits. Prerequisite: Biochemistry and histology. A general pathology course for graduate students interested in pathological processes affecting specific organs, organ systems and tissues. Pathologic aspects of immunological phenomena, spontaneous disease and host mechanisms in response to injury or microbial and viral diseases.

BMS 6607 PATHOBIOLOGY OF BONE AND JOINT DISEASE
3 credits. Prerequisite: Staff approval. Disease mechanism and structural functional alterations of the skeletal system.

BMS 6620 SEMINARS IN PATHOLOGY
1 credit. Required of graduate students in pathology; open to others by permission of the department. Current research literature and research reports by graduate students, pathology staff, and invited students.

BMS 6621 SPECIAL TOPICS IN PATHOLOGY
1 to 4 credits; maximum of 12. Prerequisite: Staff approval. Conferences and supervised laboratory work. Topics selected to meet each student's needs.

BMS 6622 SPECIAL TOPICS IN IMMUNOLOGY
3 credits. Prerequisite: BMS 6314. In-depth critical analysis and discussion of contemporary topics in immunology to obtain a comprehensive understanding of the development of current immunological concepts. Evaluation of the most recently published research literature. Seminars and discussions with invited speakers.

BMS 6630 TUMOR BIOLOGY
3 credits. Pathobiology, biochemistry, and molecular biology of neoplasia; viral and chemical carcinogenesis; immunology and therapy of cancer in man and animals.

BMS 6631 EXPERIMENTAL TUMOR BIOLOGY
2 credits. Prerequisite: BMS 6630 or consent of instructor. Development of laboratory skills and techniques used in study of various phenomena in tumor biology. Students will work in direct association with members of the BMS 6630 teaching faculty.

BMS 6641 IMMUNOPATHOLOGY
2 credits. Abnormalities and diseases having immunological bases are studied.

BMS 6642L EXPERIMENTAL IMMUNOLOGY
2 credits. Prerequisite: Consent of instructor. Corequisite: BMS 6314. Project oriented. Laboratory skills and techniques in immunobiology developed. Each student works in close association with a faculty member.

BMS 6645 PATHOBIOLOGY OF CELLULAR MEMBRANES
2 credits. Prerequisite: MCB 6401. Discussion on structural and functional changes of membranes involved in disease states.

BMS 6646 EXPERIMENTAL PATHOLOGY AND IMMUNOLOGY: A ROTATION
2 to 12 credits; maximum of 12. Prerequisite: BMS 6314, BMS 6603 and consent of instructor. Individual investigative projects in experimental pathology, immunology, membrane biochemistry, tumor biology, molecular genetics and engineering, hybridoma research, immunity of infectious diseases, and electron microscopy. Participation in all phases of experimental pathology and immunology. Laboratory training in methodology and data interpretation of basis research. Students specializing in experimental pathology and immunology must spend three terms on this rotation.

BMS 6647 ADVANCED METHODS IN IMMUNOLOGY
2 credits. Prerequisite: Consent of instructor. Corequisite: BMS 6314. A laboratory course to gain practical experience with methods used in immunology research today. Cell separation and identification techniques, isolation and analysis of protein structure, electrophoretic and chromatographic isolation procedures, hybridoma production and monoclonal antibody screening procedures, and genetic engineering.

Program in Clinical Chemistry

BMS 6612 CLINICAL CHEMISTRY AND TOXICOLOGY
4 credits. Clinical techniques employed in the diagnosis of disease; methods in toxicology.

BMS 6613 CLINICAL CHEMISTRY AND TOXICOLOGY: A ROTATION
2 to 20 credits; maximum of 20. Prerequisite: BMS 6612. Participation in all phases of practical clinical chemistry and toxicology. Chemical methodology, clinical interpretation and significance of laboratory measurements used in diagnosing diseases. Individual investigative project in clinical chemistry and toxicology. Pathology graduate students specializing in clinical chemistry must spend three terms on this rotation.

BMS 6623 SEMINARS IN CLINICAL CHEMISTRY
1 credit. Prerequisite: Consent of instructor. Required of graduate students in clinical chemistry; open to others by permission of staff. Reports and discussions of current research and clinical literature presented by clinical chemistry staff, invited speakers and graduate students.

BMS 7670 MEDICAL INFORMATION SYSTEMS
2 credits. Systems analysis techniques, both theoretical and practical, applied to the medical database. Communications within health care delivery systems studied.

Program in Clinical Immunology

BMS 6617 CLINICAL IMMUNOLOGY: A ROTATION
2 to 12 credits; maximum of 12. Prerequisite: Consent of instructor. Corequisite: BMS 6314. Participation in all phases of practical clinical immunology. Laboratory training in methodology, clinical interpretation and significance of clinical immunological, immunopathological and histocompatibility testing. Application of concepts to clinical laboratory man-

agement. Individual investigative projects in clinical immunology and immunogenetics. Students specializing in clinical immunology must spend three semesters on this rotation.

BMS 6618 CLINICAL VIROLOGY: A ROTATION
2 to 12 credits; maximum of 12. Prerequisite: Consent of instructor. Participation in all phases of practical clinical virology. Laboratory training in methodology, clinical interpretation and significance of clinical virology, with emphasis on diagnostic procedures. Individual investigative projects in clinical virology. Students specializing in clinical virology must spend three consecutive semesters on this rotation.

PHARMACOLOGY AND THERAPEUTICS

The Department of Pharmacology and Therapeutics offers a program leading to the degree of Doctor of Philosophy in the medical sciences with specialization in pharmacology.

The general research focus of the department is mechanistic, at the cellular and molecular levels. Specific areas of research include receptor and membrane pharmacology; autos mechanistic, at the cellular and molecular levels. Specific areas of research include receptor and membrane pharmacology; autonomic, renal, developmental, endocrine, gastrointestinal and neuropharmacology; teratology; fluid secretion and carbonic anhydrase inhibition; cancer chemotherapy and carcinogenesis; physical chemistry and enzymes; opioid peptides; drug metabolism; and environmental and marine toxicology.

Applicants should present undergraduate course credits in chemistry, including quantitative, analytical, organic, and physical chemistry; elementary physics and biology; and mathematics through calculus. Otherwise, well-qualified students with certain deficiencies in preparation will be allowed to make these up during the first year of graduate study. In addition to elementary and advanced study in pharmacology, candidates will pursue courses in biochemistry, physiology, and other medical sciences as determined by consultation with their advisory committees.

BMS 5465 ADVANCED MEDICAL PHARMACOLOGY
4 credits.

BMS 6400 INTRODUCTION TO PHARMACOLOGY
5 credits. Prerequisite: Elementary courses in biochemistry and physiology. Overview of the entire field of pharmacology as the study of the interactions between living systems and foreign chemicals. Intended to prepare majors for advanced courses or to familiarize nonmajors with the area.

BMS 6420 SEMINAR IN PHARMACOLOGY
1 credit. Prerequisite: BMS 6400. Research reports and discussions of current research literature by graduate students, faculty, and invited lecturers.

BMS 6463 MOLECULAR PHARMACOLOGY
5 credits. Prerequisites: BMS 6400, CHM 3401. A biochemical approach to the actions of drugs, stressing analysis of drug-receptor interactions, structure-activity relationships, kinetics of distribution of drugs, and metabolism of foreign compounds.

BMS 6466 PHYSIOLOGICAL PHARMACOLOGY
5 credits. Prerequisite: BMS 6400. Influence of drugs upon physiological systems, including nervous, endocrine, cardiovascular, renal, gastrointestinal, and musculoskeletal.

BMS 7421 RESEARCH METHODS IN PHARMACOLOGY
1 to 3 credits; maximum 6. Readings, discussions, and practical experience with modern methods used in pharmacology. Chemical and biological methods.

BMS 7423 TOPICS IN PHARMACOLOGY
1 to 3 credits; maximum 12. Seminars, informal conferences, or laboratory work on selected topics in pharmacology.

BMS 7467 PHYSIOLOGY AND PHARMACOLOGY OF EXCITABLE MEMBRANES
2 credits. Membrane ionic permeability changes underlying action and synaptic potential generation described in detail. Applications of electrophysiological and radioactive tracer techniques to analysis of drug action on excitable membranes.

PHYSIOLOGY

The Department of Physiology offers a program leading to the degrees of Master of Science and Doctor of Philosophy in the medical sciences with specialization in physiology.

Areas of specialization within the Department of Physiology include sensory physiology, general endocrinology, neuroendocrinology, neurophysiology, respiration, circulation physiology of muscle, environmental physiology, cardiac electrophysiology, epithelial transport, and neonatal physiology.

Undergraduate majors appropriate as foundations for the study of physiology are biology, chemistry, engineering mathematics or physics. The following courses are especially useful as a background for the study of physiology: general biology, vertebrate biology, general chemistry, analytical chemistry, organic chemistry, physical chemistry, general physics, calculus, and statistics. Students may find it necessary to remedy deficiencies in their background by taking undergraduate courses after admission to Graduate School.

BMS 5511 VISION
3 credits. Prerequisite: Consent of instructor. Introduction to methodology, anatomy, and function of vision.

BMS 5520C PRINCIPLES OF PHYSIOLOGY
6 credits. Prerequisite: APB 3203 or equivalent. Physiology of mammalian organ systems, with special reference to the human.

BMS 5520L LABORATORY IN PHYSIOLOGY
2 credits. Corequisite: BMS 5520C. Laboratory course designed to illustrate the principles of physiology. Students perform exercises coordinated with course topics under discussion in BMS 5520C.

BMS 5539 ADVANCED ENDOCRINOLOGY
2 credits. Prerequisite: BMS 5520C or equivalent; consent of instructor. Readings, discussion and lectures on recent advances in endocrinology.

BMS 6501 PATHOPHYSIOLOGY
3 credits. Introduction into basic mechanisms of disease states with emphasis on the cardiovascular, respiratory, renal and gastrointestinal systems.

BMS 6502 CELL PHYSIOLOGY
3 credits. Prerequisite: Physiology BMS 5520C; consent of instructor. Designed for graduate students in physiology to give them an introduction to cellular physiology of the eukaryotic cell.

BMS 6512 SURVEY OF SENSORY SYSTEMS
3 credits. Prerequisite: BMS 6510. Theories and data on human sensory reception and encoding. Audition, vision, and the chemical and cutaneous senses.

BMS 6535 SEMINAR IN PHYSIOLOGY
1 credit. S/U.

BMS 6536 RECENT ADVANCES IN PHYSIOLOGY
2 credits; maximum 10. Content varies from year to year but covers recent advances in physiology.

BMS 6537 SEMINAR ON VISION
3 credits. Current research and theory in visual function. Literature survey and design of an experiment relevant to recent theory.

BMS 6538 HISTORY OF PHYSIOLOGY
2 credits. Prerequisite: Consent of instructor. The development of physiological knowledge and concepts. Readings, lectures, and discussion.

BMS 6560C RESEARCH METHODS IN PHYSIOLOGY
2 to 4 credits; maximum 6. Special needs of each student are met by conferences and laboratory work.

BMS 6569C MARINE PHYSIOLOGY
2 credits. Prerequisite: Physiology BMS 5520C; consent of instructor. Intended for graduate students in physiology. Will be taught at Whitney Marine Laboratory.

BMS 6573 PHYSIOLOGY OF RESPIRATION
2 credits. Gas exchange in lungs and tissues. Ventilatory mechanics. Fluid mechanics of gas flow in airways. Comparative physiology and respiratory mechanisms.

BMS 6574 PHYSIOLOGY OF THE CIRCULATION OF BLOOD
2 credits. Physiology of the component parts of the circulation, relation of structure and function, emphasis on control mechanisms.

BMS 6575 RENAL PHYSIOLOGY
2 credits. Seminars on the comparative physiology aspects of renal structure and function.

BMS 6576 BODY TEMPERATURE REGULATION
2 credits. Neural and endocrine aspects of temperature regulation, hypo- and hyperthermia, adaptation to cold and heat, hibernation.

BMS 6577 NEONATAL PHYSIOLOGY
2 credits. Physiological regulation in newborn mammals.

BMS 6578 PHYSIOLOGY OF THE MAMMALIAN THYROID GLAND
2 credits. Production, secretion, control, and function of thyroid hormones; interaction with other hormones.

BMS 6579 GASTROINTESTINAL PHYSIOLOGY
2 credits. Physiology of the vertebrate salivary glands, stomach, small and large intestine, pancreas, liver, and the muscular movements of the gastrointestinal system.

BMS 6933 SENSORY SCIENCE SEMINAR
1 credit. Results of current investigations in sense organ function will be covered. S/U.

BMS 7467 PHYSIOLOGY AND PHARMACOLOGY OF EXCITABLE MEMBRANES
2 credits. Membrane ionic permeability changes underlying action and synaptic potential generation described in detail.

BMS 7570 BASIC CARDIAC ELECTROPHYSIOLOGY
2 credits. Study of the normal electrophysiology and ionic mechanisms involved in various regions of the heart.

BMS 7572 ELECTROPHYSIOLOGICAL BASIS OF CARDIAC DYSRHYTHMIAS
2 credits. Study of normal cardiac cellular electrophysiology and changes which result in cardiac dysrhythmias. New techniques in diagnosis and management.

UNDERGRADUATE COURSES

These courses are offered by the College of Medicine for students majoring in other colleges.

Individual interdisciplinary programs leading to an Interdisciplinary Studies major may be designed and initiated, with review and approval by the IDS Committee of the College of Liberal Arts and Sciences, by a student whose academic goals are not met by an existing departmental undergraduate major.

The Department of Biochemistry and Molecular Biology, the Department of Neuroscience and the Junior Honors Medical Program offer IDS majors in conjunction with the College of Liberal Arts and Sciences' undergraduate degree granting program.

EXP 3719L LABORATORY TOPICS IN PSYCHOPHYSICS
1-2 credits. Identical with EXP 3714L. Prerequisite: PSY 2013 or consent of instructor. A practicum in experimental methodology. Students will collect, analyze and evaluate data on specific problems related to brain mechanisms of skin sensation.

APB 3203 BASIC ANATOMY AND PHYSIOLOGY
3 credits. Prerequisite: ZOO 2013C. Open to students in the College of Nursing and Health Related Professions and to others by permission of instructor. The structure and physiological function of selected human systems.

BMS 4021 INTRODUCTION TO NEUROCHEMISTRY
3 credits. Prerequisite: Biochemistry. Discussion of current topics in neurochemistry. To include the metabolism of carbohydrates, lipids, amino acids, proteins and nucleic acids, the metabolism and function of neurotransmitters and axoplasmic flow.

BMS 4022 BIOCHEMICAL AND NEURAL SCIENCES SEMINAR
1 credit. Discussion of topics of current interest in the biochemical and neural sciences.

BMS 4023 CURRENT TOPICS IN BRAIN AND BEHAVIOR
3 credits. Identical with PSB 4003. Prerequisite: BMS 4025. Corequisite: BMS 4024. Biological bases of behavior, and structural and functional correlates of learning.

BMS 4024 EXPERIMENTAL METHODS IN BRAIN AND BEHAVIOR
1 to 4 credits. Identical with PSB 4104L. Prerequisite: BMS 4025 and PSB 3004. Corequisite: BMS 4023. An introduction to current techniques used in research on brain and behavior.

BMS 4025 INTRODUCTION TO THE NEUROSCIENCES
3 to 5 credits. Prerequisite: ZOO 2014 or equivalent and consent of instructor. Structure and basic functions of the mammalian nervous system. Human neuroanatomy, including peripheral and central structures from spinal cord to cerebral cortex. Fundamental concepts of neurophysiology, including initiation, propagation and synaptic transmission of the nerve impulse. Sensory, motor and integrative activities. Elements of neurochemistry and neuropharmacology.

BMS 4401 PHARMACOLOGY
2 credits. This course is designed to introduce the subject to interested students in a research and topically oriented manner and will be of particular value to students considering research-oriented careers in the biological or medical sciences.

BCH 4313 INTRODUCTION TO PHYSICAL BIOCHEMISTRY AND MOLECULAR BIOLOGY
3 credits. Prerequisites: Organic chemistry. The first half of BCH 4313-BCH 4203. An introduction to physical biochemistry and molecular biology. Topics include a survey of the structure, chemistry and function of proteins and nucleic acids; enzyme kinetics and mechanisms of catalysis; regulation of gene expression at the level of DNA, RNA and protein synthesis in both prokaryotic and eukaryotic organisms.

BCH 4203 INTRODUCTION TO INTERMEDIARY METABOLISM
3 credits. Prerequisites: BCH 4313. The second half of BCH 4313-BCH 4203. Topics include a survey of biosynthetic and degradative pathways of carbohydrates, lipids and amino acids in addition to photosynthesis, energy conservation and metabolic control.

BCH 4413 MOLECULAR AND CELL BIOLOGY
4 credits. Prerequisite: Consent of instructor. Corequisite: A course in biology at 3000 level or above. The course provides in-depth treatment of molecular and cell biology and is recommended for outstanding undergraduate students particularly, but not exclusively, those interested in the individual Interdisciplinary Studies program and/or graduate work. This course is not considered appropriate for pre-professional students. Topics will include DNA replication; RNA synthesis, processing and regulation; protein synthesis; control of gene expression; and the biochemistry of cell organelles.

BCH 4905 BIOCHEMISTRY SENIOR RESEARCH
3 to 5 credits; maximum 15. Prerequisites: BCH 4313, CHM 3210-3211 or equivalent, or department approval. Enrollment limited to independent interdisciplinary majors. Laboratory investigations of contemporary biochemical problems. May be repeated with change of content up to a maximum of 15 credits. Senior thesis required.

BMS 4905 MEDICAL SCIENCES SENIOR RESEARCH
3 to 5 credits. Prerequisite: Department approval. Corequisite: BCH 4313. Laboratory or literature investigations of problems of current interest in the medical sciences. May be repeated.

Enrollment for the following courses restricted to students accepted in the Basic Biological and Medical Sciences Program:

BMS 4012 CELL BIOLOGY SEMINAR
5 credits. Cellular functions in health and disease. The structure and molecular biology of the mammalian cells are stressed including such things as virus-cell interactions, inborn errors of metabolism and bacterial growth. Identical to PCB 4930.

BMS 4010 INTRODUCTION TO MEDICAL SCIENCES SEMINAR
3 credits. Selected in-depth special topics in the preclinical basic sciences and their application to clinical problems.

BMS 4011 INTRODUCTION TO MEDICAL SCIENCES SEMINAR
3 credits. Continuation of BMS 4010.

BMS 4013 INTRODUCTION TO MEDICAL SCIENCES SEMINAR III
3 credits. Continuation of BMS 4010.

INDEPENDENT INTERDISCIPLINARY MAJOR IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

Students matriculating in the College of Liberal Arts and Sciences who desire an undergraduate emphasis in biochemistry and molecular biology, should consider the Independent Interdisciplinary Major Program. The program is designed for students who wish to pursue either graduate research in biochemistry and related medical sciences, or with a strong interest in academic medicine. An independent interdisciplinary major in biochemistry may be arranged through the Department of Biochemistry and Molecular Biology and submitted for approval by the Committee

of Interdisciplinary Studies of the College of Liberal Arts and Sciences. Program applicants must have a strong background in chemistry and biology courses.

The advanced level course work required includes BCH 4313 and 4203, two semesters of BCH 4905 Biochemistry Senior Research and submission of a senior thesis. The latter provides an opportunity for an exceptionally well-qualified student to participate with a particular faculty member on an individualized research program in the faculty member's research facility. Enrollment in BCH 4313 is a suggested prerequisite for submission of a proposed independent interdisciplinary major in biochemistry to the College of Liberal Arts and Sciences and for enrollment in BCH 4905. Electives include advanced undergraduate offerings of the Departments of Botany, Chemistry, Computer Science, Microbiology and Cell Science, Neuroscience and Zoology.

Because of the individualized nature of the program, only a small number of students selected by the sponsoring faculty will be accepted annually. Application should be made during the sophomore year to enter the program during the junior year to the Department of Biochemistry and Molecular Biology or to the Assistant Dean for Preprofessional Education in the Colleges of Medicine, Dentistry and Veterinary Medicine.

FACULTY

Effective as of January 1, 1984

ANATOMY

CAMERON, DON F., Ph.D., (Med. Univ. of S.C.)
Assistant Professor

* FELDHERR, CARL M., Ph.D., (Univ. of Penn.)
Professor

* HOLLINGER, THOMAS, G., Ph.D., (Purdue Univ.)
Associate Professor

* KALLENBACH, ERNST, A., Ph.D., (McGill University)
Professor

* LARKIN, LYNN H., Ph.D., (Univ. of Colorado)
Professor

LOFTON, JOSEPH E., M.D., (Univ. of Alabama)
Professor and
Assistant Dean for Preprofessional Education

* ROMRELL, LYNN J., Ph.D., (Utah State University)
Associate Professor

* ROSS, MICHAEL H., Ph.D., (New York University)
Professor and Chairman

SANDERS, WILLIE J., B.S., (Univ. of Florida)
Associate Professor

* SELMAN, KELLY, Ph.D., (Harvard University)
Associate Professor

* WALLACE, ROBIN A., Ph.D., (Columbia University)
Visiting Professor

* WEST, CHRISTOPHER M., Ph.D., (Calif. Inst. of Tech.)
Assistant Professor

ANESTHESIOLOGY

ANDERSEN, THORKILD W., M.D., (Univ. of Copenhagen)
Professor

BARNES, PEGGY A., M.D., (Univ. of Florida)
Assistant Professor

BENEKEN, JAN E. W., Ph.D., (State Univ., Utrecht, Holland)
Professor

BERGER, JERRY J., M.D., (Duke University)
Assistant Professor

BERMAN, LAWRENCE S., M.D., (Jefferson Medical Col.)
Associate Professor and
Associate Professor of Pediatrics

* BLOCK, A. JAY, M.D., (Johns Hopkins)
Professor and
Professor and Chief of Pulmonary Medicine

* BOYSEN, PHILIP G., M.D., (Loyola-Stritch)
Associate Professor and
Chief, Respiratory Therpy VAMC and
Associate Professor of Pulmonary Medicine

* CATON, DONALD, M.D., (Columbia Univ.)
Professor and Chief, Obstetric Anesthesia and
Professor of Obstetrics and Gynecology

COHEN, JERRY A., M.D., (Univ. of Miami)
Assistant Professor and Co-Chief,
Division of Thoracic and Cardiovascular Anesthesia

DAVIS, RICHARD F., M.D., (Univ. of California)
Assistant Professor and Co-Chief,
Division of Thoracic and Cardiovascular Anesthesia

DE PADUA, CONSTANTE, B., M.D., (Univ. of Philippines)
Associate Professor

GALLAGHER, THOMAS, J., M.D., (Univ. of Kentucky)
Associate Professor and Chief, Division of Critical Care
Medicine, Associate Professor of Surgery

GIBBS, CHARLES P., M.D., (Indiana University)
Professor and Professor of Obstetrics and Gynecology and
Assistant Dean for Curriculum

GOODWIN, SALVATORE R., M.D., (Univ. of Kentucky)
Assistant Professor and
Assistant Professor of Pediatrics

* GRAVENSTEIN, JOACHIM S., M.D., (Harvard University)
Graduate Research Professor

GRAVES, SHIRLEY A., M.D., (Univ. of Miami)
Professor and
Chief, Division of Pediatric Anesthesia
Professor of Pediatrics

JAMES, CHRISTOPHER F., M.D., (Univ. of Maryland)
Assistant Professor

KAPLAN, RICHARD F., M.D., (SUNY-Upstate)
Assistant Professor

* KRISCHER, JEFFREY P., Ph.D., (Harvard University)
Associate Professor and
Associate Professor of Pediatrics

MELKER, RICHARD J., Ph.D., M.D.,
(Albert Einstein Medical College)
Assistant Professor and
Assistant Professor of Pediatrics and Surgery

MODELL, JEROME H., M.D., (Univ. of Minnesota)
Professor and Chairman

MUNSON, EDWIN S., M.D., (Univ. of Tennessee)
Professor and
Chief of Anesthesia/VAMC

PASHAYAN, ANNETTE G., M.D., (Bowman-Gray Sch. of Med.)
Assistant Professor and
Assistant Professor of Neurosurgery

PAUL, WILLIAM L., M.D., (Univ. of Kentucky)
Associate Professor and
Associate Professor of Neurological Surgery

* Members of the Graduate Faculty

* PAULUS, DAVID A., M.D., (Univ. of Vermont)
Assistant Professor and
Assistant Professor of Mechanical Engineering

PERKINS, HAVEN M., M.D., (Univ. of Louisville)
Professor

RUMLEY, THOMAS, O., M.D., (Univ. of North Carolina)
Assistant Professor and
Assistant Professor of Surgery/Chief

SAGA-RUMLEY, SEGUNDINA A., M.D.,
(Univ. of Philippines)
Associate Professor

SCHULTETUS, RAYMOND R., M.D., (Univ. of Kentucky)
Assistant Professor

* SHAH, DINESH O., Ph.D., (Columbia University)
Professor and
Professor of Chemical Engineering

SKORA, IRENA A., M.D., (Jagiellonski University)
Associate Professor and JHEP Chairman/JHEP

Volunteer Faculty

CHAPMAN, ROY L., JR., M.D., (Univ. of Tennessee)
Clinical Assistant Professor/Gainesville

DOUGLAS, MICHAL E., M.D., (Univ. of Arizona)
Clinical Assistant Professor/Boone, N.C.

DOWNS, JOHN B., M.D., (Univ. of Florida)
Clinical Associate Professor/Urbana, Ill.

FIORELLO, ANTHONY W., M.D., (Jefferson Med. Col.)
Clinical Instructor/Fort Lauderdale

KRUSE, JOHN C., M.D., (George Washington Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

LEE, PETER K., M.D., Ch.B., (Moukden Med. Col.)
Research Professor Emeritus/Gainesville

MURRAY, IVES P., M.D., (George Washington Univ.)
Clinical Assistant Professor/Denver, Colo.

NAGEL, EUGENE L., M.D., (Washington University)
Clinical Professor/Winter Haven

RACKSTEIN, ANDREW D., M.D., (Chicago Med. Sch.)
Clinical Assistant Professor/Clearwater

ROSS, NORMAN L., M.D., (University of Miami)
Clinical Instructor/Venice

SEAGER, ORIN A., M.D., (Univ. of Pennsylvania)
Clinical Assistant Professor/Gainesville

SIMON, MICHAEL J., M.D., (Univ. of Missouri)
Clinical Assistant Professor/Winter Haven

VOGELHUT, MARK, M., M.D., (Univ. of North Carolina)
Clinical Assistant Professor/Tallahassee

WERBA, JAMES V., M.D., (Tulane Univ.)
Clinical Instructor/Orlando

BIOCHEMISTRY AND MOLECULAR BIOLOGY

* ALLEN, CHARLES M., JR., Ph.D., (Brandeis University)
Professor of Biochemistry and Molecular Biology

ANGELIDES, KIMON J., Ph.D., (Univ. of Calif.-Santa Cruz)
Assistant Professor of Biochemistry and Molecular Biology and Neuroscience

* BOYCE, RICHARD P., Ph.D., (Yale University)
Professor of Biochemistry and Molecular Biology

CHAU, VINCENT, Ph.D., (University of Virginia)
Assistant Professor of Biochemistry and Molecular Biology

* CHUN, PAUL W., Ph.D., (University of Missouri)
Professor of Biochemistry and Molecular Biology

* COHEN, ROBERT J., Ph.D., (Yale University)
Associate Professor of Biochemistry and Molecular Biology

* DUNN, BEN M., Ph.D., (University of Calif.-Santa Barbara)
Associate Professor of Biochemistry and Molecular Biology

* FRIED, MELVIN, Ph.D., (Yale University)
Professor of Biochemistry and Molecular Biology

KILBERG, MICHAEL S., Ph.D., (Univ. of South Dakota)
Assistant Professor of Biochemistry and Molecular Biology

KOROLY, MARY J., Ph.D., (Bryn Mawr College)
Visiting Assistant Professor of Biochemistry and Molecular Biology

* LAIPIS, PHILIP J., Ph.D., (Stanford University)
Associate Professor of Biochemistry and Molecular Biology

* MANS, RUSTY J., Ph.D., (University of Florida)
Professor of Biochemistry and Molecular Biology

* McGUIRE, PETER M., Ph.D., (Univ. of North Carolina)
Assistant Professor of Biochemistry and Molecular Biology

* O'BRIEN, THOMAS, W., Ph.D., (Marquette University)
Professor and Acting Chairman

* ROBERTS, R. MICHAEL, Ph.D., (Oxford University)
Professor of Biochemistry and Molecular Biology

* STEIN, GARY S., Ph.D., (University of Vermont)
Professor of Biochemistry and Molecular Biology and Associate Chairman

* STEVENS, ANN R., Ph.D., (University of Colorado)
Professor of Biochemistry and Molecular Biology and Associate Dean for Research, Graduate School

* YOUNG, D. MICHAEL, M.D., (Duke University)
Professor of Biochemistry and Molecular Biology and Professor of Medicine

COMMUNITY HEALTH AND FAMILY MEDICINE

ANDERSON, MERRILL A., M.D., (Thomas Jefferson Univ.)
Associate Professor and JHEP Chairman JHEP SVMC

BLAKE, JEROME, B.S.M.T., (University of Florida)
Assistant In,
Community Health and Family Medicine

BROOKS, STEPHEN JOHN DAVID, M.D., (Dublin Univ.)
Assistant Professor and Associate Director,
Division of Geriatric Medicine/JHEP/SVMC

COLLINS, TERENCE, M.D., (Creighton University)
Associate Professor of Community Health and Family Medicine

* CRANDALL, LEE A., Ph.D., (Purdue University)
Associate Professor of Community Health and Family Medicine

CURRY, ROBERT W., JR., M.D., (Duke University)
Associate Professor and Associate Chairman of
Community Health and Family Medicine

DAVIS, JOHN J., P.A.-C., (Duke University)
Physician Assistant In,
Community Health and Family Medicine

DEAL, WILLIAM B., M.D., (University of North Carolina)
Dean, College of Medicine and Associate Vice President for Clinical Affairs; Professor of Medicine, Immunology and Medical Microbiology, Pharmacy Practice; Joint Professor of Community Health and Family Medicine

DIAMOND, ERIC L., Ph.D., (University of Miami)
Visiting Assistant Professor of
Community Health and Family Medicine

DUERSON, MARGARET, M.Ed., (University of Florida)
Assistant In,
Community Health and Family Medicine

EASTON, IAN S., Ph.D., (University of Florida)
Administrative Director, Outpatient Physician's Group and Adjunct Assistant Professor of Community Health and Family Medicine

GAUDRY, CHARLES LEON, JR., M.D., (University of Virginia)
Associate Professor/JHEP/Chief of Service/UH

GRAUER, KENNETH A., M.D., (SUNY-Upstate)
Assistant Professor of Community Health and Family Medicine

GREEN, RUSSELL J., JR., M.D., (University of Virginia)
Professor of Medicine and Joint Professor of Community Health and Family Medicine

HADDY, RICHARD I., M.D., (Michigan State University)
Assistant Professor of Community Health and Family Medicine

HARRIS, TOM V., M.B.A., (University of Florida)
Assistant in Administration and Adjunct Instructor of Community Health and Family Medicine

HAYFLICK, LEONARD, Ph.D., (University of Pennsylvania)
Professor and Director for Gerontological Studies, Liberal Arts and Sciences; Affiliate Professor of Community Health and Family Medicine

HODGIN, JON, M.D., (Univ. of North Carolina)
Assistant Professor of Psychiatry and Joint Assistant Professor of Community Health and Family Medicine

JERNIGAN, JAMES A., M.D., (Washington University)
Associate Professor and Chief of Community Health and Family Medicine and Associate Professor of Medicine

KANE, ANDREW J., M.D., (SUNY-Buffalo)
Assistant Professor/JHEP/UH

* KILPATRICK, KERRY E., Ph.D., (University of Michigan)
Professor of Community Health and Family Medicine and Industrial and Systems Engineering;
Director Health Systems Research Division

KNIGHT, JOHN C., P.A.-C., (Emory University)
Physician Assistant In,
Community Health and Family Medicine

KOSCH, SHARON G., Ph.D., (University of Florida)
Assistant Professor of Behavioral Sciences, Liberal Arts and Sciences and Joint Assistant Professor of Community Health and Family Medicine

KRAVITZ, LARRY, M.D., (George Washington University)
Assistant Professor of
Community Health and Family Medicine

KURITZKY, LOUIS, M.D., (Medical College of Virginia)
Assistant Professor of Community Health and Family Medicine

LEIGH, ELBERT H., M.D., (Washington Univ. Sc. of Med.)
Assistant Professor/JHEP/UH

LOPEZ, LARRY, Pharm. D., (University of Florida)
Assistant Professor of Pharmacy; Joint Assistant Professor of Community Health and Family Medicine

MASE, DARREL, J., Ph.D., (Columbia University)
Visiting Professor and Associate Chairman of
Community Health and Family Medicine

PETRY, L. JEANNINE, M.D., (Medical Coll. of Ohio at Toledo)
Assistant Professor of Community Health and Family Medicine

RAY, BELTON CRAIG, JR., M.D., (Emory University)
Assistant Professor and Associate Director/JHEP/SVMC

ROBINSON, JAMES D., PHARM. D., (Univ. of Cincinnati)
Joint Associate Professor of
Community Health and Family Medicine and
Associate Professor of Pharmacy

ROOKS, LARRY, M.D., (University of Florida)
Assistant Professor of
Community Health and Family Medicine

SCHULKIND, MARTIN L., M.D., (Chicago Med. School)
Associate Professor of Community Health and Family Medicine and Associate Professor of Pediatrics

SILVERSTEIN, JANET H., M.D., (Univ. of Pennsylvania)
Assistant Professor of Community Health and Family Medicine and Assistant Professor of Pediatrics

STANLEY, ANTHONY G., P.A., (Univ. of Florida)
Physician Assistant In, Community Health and Family Medicine

STEWART, WILLIAM L., M.D., (Johns Hopkins)
Professor and Chairman

WEATHER, PAUL E., M.D., (Indiana Univ. School of Medicine)
Assistant Professor/JHEP/UH

Volunteer Faculty

ALLENDE, NICHOLAS, M.D., (University of Chile)
Clinical Assistant Professor JHEP Jacksonville

BEACH, THOMAS H., M.D., (University of Wisconsin)
Clinical Assistant Professor JHEP Jacksonville

BIGGERSTAFF, JAMES T., M.D., (Louisiana State Univ.)
Clinical Assistant Professor JHEP Jacksonville

BODDICKER, RONALD FRANCIS, Ph.D., (Purdue Univ.)
Clinical Assistant Professor JHEP Jacksonville

BURKE, CHARLES H., M.D., (Emory University)
Clinical Assistant Professor JHEP Jacksonville

CARANASOS, GEORGE J., M.D., (Johns Hopkins)
Professor of Medicine
Joint Professor of Community Health and Family Medicine

COOPER, GARY R., M.D., (Tulane University)
Clinical Assistant Professor Gainesville

DRAPER, ARTHUR D., JR., M.D., (Emory University)
Clinical Assistant Professor JHEP Jacksonville

FRIEDLINE, PAUL N., M.D., (Temple University)
Clinical Instructor JHEP Jacksonville

HOGUE, ROBERT J., JR., M.D., (Univ. of Oklahoma)
Clinical Assistant Professor Gainesville

LEVINSON, RICHARD M., M.D., (University of Illinois)
Clinical Associate Professor JHEP Jacksonville

LEVY, NORMAN S., M.D., (Western Reserve University)
Clinical Assistant Professor Lake City, Florida

MEDLEY, EVAN SCOTT, M.D., (University of Kentucky)
Clinical Assistant Professor Gainesville

McCLOW, MARVIN V., M.D., (University of Iowa)
Clinical Assistant Professor JHEP Jacksonville

McGIBONY, JAMES T., M.D., (Emory University)
Clinical Associate Professor JHEP Jacksonville

McLAMB, JAMES N., M.D., (Univ. of North Carolina)
Clinical Associate Professor JHEP Jacksonville

PALMER, GEORGE SAXON, M.D., (Johns Hopkins)
Clinical Professor Tallahassee

PICHLER, FLOYD L., M.D., (Loma Linda University)
Clinical Assistant Professor JHEP Jacksonville

PROBERT, WALTER, J.S.D., (Yale University)
Joint Professor of Community Health and Family Medicine
and Professor of Law

RADELET, MICHAEL L., Ph.D., (Purdue University)
Assistant Professor of Sociology and
Joint Assistant Professor of Community Health and
Family Medicine

ROWLEY, SAMUEL, M.D., (Jefferson Medical College)
Clinical Associate Professor JHEP Jacksonville

SELANDER, GUY T., M.D., (New Jersey Medical College)
Clinical Associate Professor JHEP Jacksonville

STEIN, GERALD H., M.D., (University of Pennsylvania)
Professor of Medicine VAMC

STERN, THOMAS L., M.D., (Univ. of Oregon Medical School)
Clinical Professor of Community Health and Family Medicine

WAGNER, JAMES T., Ph.D., (University of Florida)
Adjunct Assistant Professor, Community Health and
Family Medicine Gainesville

WATSON, CLETUS, M.A., (LaSalle College)
Adjunct Instructor Gainesville

WHITE, DAVID C., Ph.D., M.D., (Tufts University)
Adjunct Professor JHEP Jacksonville

WILLIAMS, ARTHUR R., Ph.D., (Cornell University)
Adjunct Assistant Professor of Community Health and
Family Medicine

YOUNG, THOMAS K., M.D., (Northwestern Univ.)
Clinical Assistant Professor Gainesville

Preceptors

ALLEN, SUSAN H., M.D., (University of Kansas)
Dowling Park, Florida

ANDRES, JOEL, M.D., (SUNY at Buffalo)
Department of Pediatrics, College of Medicine

ASHLEY, ROBERT G., M.D., (University of Florida)
Gainesville, Florida

AUERBACH, DAVID, M.D., (University of Florida)
Gainesville, Florida

BAKER, R. JOHNSON, M.D., (Temple University)
Gainesville, Florida

BANKS, CULLEN W., M.D., (Howard University)
Gainesville, Florida

BLUMER, DAVID C., M.D., (University of Florida)
Gainesville, Florida

BUCCIARELLI, RICHARD L., M.D., (Univ. of Michigan)
Pediatrics Neonatology Division, College of Medicine

BUSH, CLINTON, M.D., (Columbia University)
Gainesville, Florida

CALDWELL, JACQUES R., M.D., (Johns Hopkins University)
Gainesville, Florida

CASSISI, NICHOLAS J., M.D., (Univ. of Miami Sch. of Med.)
Department of Surgery, College of Medicine

CHACKO, JOHN Y., M.D., (University of Kerala, India)
Department of Surgery, Lake City VA Medical Center

CHODOSH, LANCE I., M.D., (Georgetown University)
Gainesville, Florida

COLLANTE, RUDI, M.D., (Far Eastern University, Philippines)
Alachua, Florida

CRUZ, AMELIA C., M.D., (Far Eastern University, Philippines)
Department of Obstetrics and Gynecology, College of Medicine

DEBUSK, FRANKLIN, M.D., (Johns Hopkins)
Department of Pediatrics, College of Medicine

DeFORD, JAMES, M.D., (University of Florida)
Gainesville, Florida

de la TORRE, JOSE, M.D., (University of Havana)
Student Health Service, University of Florida

DEROVANESIAN, JACK, M.D., (University of Florida)
Department of Emergency Medicine,
Alachua General Hospital, Gainesville, Florida

ERICKSON, ROBERT A., M.D., (University of Florida)
Gainesville, Florida

EVANS, WILLIAM C., JR., M.D., (Duke University)
Gainesville, Florida

FLETCHER, CHARLES T., M.D., (University of Florida)
Gainesville, Florida

FLOWERS, FRANK, M.D., (University of Florida)
Department of Medicine, College of Medicine

FRIEDLAENDER, ROBERT, M.D., (Wayne State University)
Gainesville, Florida

HEILMAN, KENNETH, M.D., (University of Virginia)
Department of Neurology, College of Medicine

JOHNSON, JAMES A., M.D., (Emory University)
Department of Radiology,
Alachua General Hospital, Gainesville, Florida

KULDAU, JOHN, M.D., (Case Western Reserve Univ.)
Department of Psychiatry, College of Medicine

LUKOWSKI, MICHAEL J., M.D., (University of Florida)
Gainesville, Florida

MANSHEIM, BERNARD, M.D., (University of Wisconsin)
Gainesville, Florida

MICHELSEN, THOMAS A., M.D.,
(Col. of Osteopathic Med. & Surgery)
JHEP/Jacksonville, Florida

MOUAT, DAVID, M.D., (University of Pittsburgh)
Gainesville, Florida

ORLANDO, JACQUELINE, Ph.D., (University of Florida)
Gainesville, Florida

ORR, LOUIS M., JR., M.D., (Emory University)
Gainesville, Florida

PANUSH, RICHARD S., M.D., (University of Michigan)
Department of Medicine, College of Medicine

RAFFA, JAMES, M.D., (Medical College of Virginia)
Gainesville, Florida

RAMADAN, A.M., M.D., (Alexandria Medical School, Egypt)
Gainesville, Florida

REGELADO, MANUAL F., M.D., (University of Havana)
Gainesville, Florida

SESSIONS, W. HERMAN, M.D., (Medical College of Georgia)
JHEP/Jacksonville, Florida

SLATON, ROBERT C., M.D., (University of Florida)
Gainesville, Florida

STREIFF, RICHARD, M.D., (Univ. of Basel, Switzerland)
Department of Medicine, College of Medicine

TARRANT, DARREL, M.D., (University of Kentucky)
Gainesville, Florida

VARTABEDIAN, ROY E., DH. Sc., (Loma Linda Univ.)
Florida Hospital, Orlando, Florida

VAUGHEN, JUSTINE, M.D., (Temple University)
Gainesville, Florida

WARRICK, WILLIAM H., III, M.D., (Univ. of Pennsylvania)
Gainesville, Florida

IMMUNOLOGY AND MEDICAL MICROBIOLOGY

* BERNS, KENNETH I., M.D., (Johns Hopkins)
Professor and Chairman and Professor of Pediatrics

* BOYLE, MICHAEL D.P., M.D., (Chester Beatty Res. Inst.)
Associate Professor and Associate Professor of Pediatrics)

* CRANDALL, RICHARD B., Ph.D., (Purdue University)
Professor

* DUCKWORTH, DONNA H., Ph.D., (Johns Hopkins)
Professor

* FLANEGAN, JAMES B., Ph.D., (University of Michigan)
Associate Professor

* GIFFORD, GEORGE E., Ph.D., (University of Minnesota)
Professor and Professor of Microbiology and Cell Science

* HAUSWIRTH, WILLIAM W., Ph.D., (Oregon State Univ.)
Associate Professor

* HOLLOMAN, WILLIAM K., Ph.D., (Univ. of Calif.-Berkeley)
Associate Professor

* MUZYCZKA, NICHOLAS, Ph.D., (Johns Hopkins)
Associate Professor

* SIDEN, EDWARD J., Ph.D., (Univ. of Calif.-San Diego)
Assistant Professor

* SMALL, PARKER A., JR., M.D., (Univ. of Cincinnati)
Professor and Professor of Pediatrics

* STEIN, JANET I., Ph.D., (Princeton University)
Associate Professor and Associate Professor of Biochemistry and Molecular Biology

MEDICINE

General Medicine and Community Programs

BUSBY, MARY J., M.D., (Univ. of Texas-Galveston)
Assistant Professor

BYRD, THOMAS F., M.D., (Vanderbilt Univ.)
Chief Resident and Instructor

CARANASOS, GEORGE J., M.D., (Johns Hopkins)
Professor and Chief

CICALE, MICHAEL J., M.D., (Georgetown Univ.)
Chief Resident and Instructor

CORMAN, LOURDES C., M.D.,
(Woman's Medical College of Pennsylvania)
Assistant Professor

JERNIGAN, JAMES A., M.D., (Washington University)
Associate Professor of Community Health and Family Medicine and Associate Professor of Medicine

MARSTON, ROBERT Q., M.D., (Med. Col. of Virginia)
Professor and President of University

* McGUIGAN, JAMES E., M.D., (St. Louis University)
Professor and Chairman, Department of Medicine and Professor of Immunology and Medical Microbiology

MORELAND, ALVIN F., D.V.M., (University of Georgia)
Professor and Professor of Comparative Medicine

PETERS, WAYNE L., M.D., (University of Colorado)
Assistant Professor JHEP

* STEIN, GERALD H., M.D., (Univ. of Pennsylvania)
Assistant Professor and Assistant Professor of Community Health and Family Medicine, Nursing and Psychology

* YOUNG, DAVID MICHAEL, M.D., (Duke University)
Professor of Biochemistry and Molecular Biology and Medicine

Volunteer Faculty

ALLEN, SUSAN D., M.D., (University of Kansas)
Clinical Instructor/Dowling Park

ANELLO, JOSEPH P., JR., M.D., (Univ. of Padua, Italy)
Clinical Instructor JHEP Jacksonville

ANDERSON, RICHARD M., M.D., (Emory University)
Clinical Instructor Gainesville

BRASHEAR, BILLY, M.D., (University of Louisville)
Clinical Instructor/Gainesville

COLLINS, MICHAEL, M.D., (Univ. of Miami)
Clinical Assistant Professor Orlando Regional Med. Center

CRAGO, JOHN A., M.D., (Cornell Univ.)
Clinical Instructor Gainesville

CUNNINGHAM, RICHARD W., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

DAWKINS, WILBERT L., SR., M.D., (Meharry Med. Col.)
Clinical Assistant Professor JHEP Jacksonville

DOFF, SIMON D., M.D., (Long Island Col. of Medicine)
Clinical Professor JHEP Jacksonville

EBBINGHOUSE, JOE C., M.D., (Indiana Univ.)
Clinical Associate Professor JHEP Jacksonville

EMMEL, G. LEONARD, M.D., (Univ. of Pennsylvania)
Clinical Instructor Gainesville

FADEM, JEROLD J., M.D., (Univ. of Missouri)
Clinical Associate Professor Orlando Regional Med. Center)

FLETCHER, JUANITA, M.D., (Howard Univ.)
Clinical Instructor JHEP

GILLESPIE, ROBERT R., JR., M.D., (Tulane University)
Clinical Assistant Professor JHEP Jacksonville

GROOVER, MARSHALL E., M.D., (University of Georgia)
Clinical Associate Professor JHEP Jacksonville

HALE, WILLIAM E., M.D., (Medical College of Virginia)
Clinical Assistant Professor Dunedin

HARRISON, I. BARNETT, M.D., (Emory University)
Clinical Assistant Professor Tallahassee

LEE, HARRY G., M.D., (Cornell University)
Clinical Assistant Professor JHEP Jacksonville

MENGEL, MARVIN C., M.D., (Johns Hopkins)
Clinical Assistant Professor Orlando

MILANI, RICHARD V., M.D., (Univ. of Florida)
Adjunct Assistant Professor JHEP Jacksonville

MONSOUR, FARIS S., JR., M.D., (Georgetown University)
Clinical Professor JHEP Jacksonville

NEDER, GEORGE A., JR., M.D., (Emory University)
Clinical Assistant Professor/Orlando Regional Med. Center)

NEEDLEMAN, ROBERT D., M.D., (Pennsylvania State Univ.)
Clinical Assistant Professor/Orlando Regional Med. Center

PALMER, ROBERT, JR., M.D., (Tulane Univ.)
Clinical Associate Professor Pensacola

ROBERT, VICTOR B., M.D., (Univ. of Buenos Aires)
Clinical Assistant Professor/Orlando Regional Med. Center)

ROSENBERG, STEPHEN J., M.D., (Univ. of Pennsylvania)
Clinical Associate Professor/Orlando Regional Med. Center)

SLATON, ROBERT C., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

STRACHAN, JAMES B., M.D., (Washington University)
Clinical Professor JHEP Jacksonville

WEBB, MICHAEL J., M.D., (University of Miami)
Clinical Instructor/Winter Park

WEIGEL, WALTER W., M.D., (Emory University)
Clinical Instructor Palatka

YOFFEE, HARRY F., M.D., (Tulane Medical School)
Clinical Assistant Professor JHEP Jacksonville

YOUNG, MARTIN D., M.D., (Johns Hopkins)
Adjunct Research Professor/Gainesville

Cardiology

ABELA, GEORGE S., M.D., (American Univ. of Beriut)
Assistant Professor

ARIET, MARIO, Ph.D., (University of Florida)
Professor and Chief, Computer Sciences and
Professor of Medicine and
Professor of Community Health and Family Medicine

BASS, THEODORE, M.D., (Brown University)
Assistant Professor JHEP

BUSS, DARYL D., D.V.M., Ph.D., (Univ. of Wisconsin)
Associate Professor and
Associate Professor of Veterinary Medicine

CONETTA, DONALD A., M.D., (Duke University)
Assistant Professor JHEP

CONTI, C. RICHARD, M.D., (Johns Hopkins)
Professor and Chief

CREVASSE, LAMAR E., JR., M.D., (Duke University)
Professor and Assistant Dean for Continuing Medical Education

FELDMAN, ROBERT L., M.D., (Rutgers University)
Associate Professor

GEISER, EDWARD A., M.D., (University of Cincinnati)
Assistant Professor

GREEN J. RUSSELL, M.D., (University of Virginia)
Professor and Professor of Community Health and Family Medicine

HILL, JAMES A., M.D., (University of Maryland)
Assistant Professor

LOMBARD, CHRISTOPHE, D.V.M., (Univ. of Zurich)
Affiliate Assistant Professor

MEHTA, JAWAHAR, M.D., (Med. Col., Amristar, India)
Associate Professor

MILLER, ALAN B., M.D., (University of Florida)
Associate Professor and Division Chief/JHEP

* NICHOLS, WILMER W., Ph.D., (University of Alabama)
Associate Professor and Assistant Professor of Physics

* PEPINE, CARL J., M.D., (New Jersey Medical School)
Professor and Chief/VAMC

SHORT, WILLIAM G., M.D., (West Virginia Univ.)
Assistant Professor/JHEP

TAYLOR, W. JAPE, M.D., (Harvard University)
Distinguished Service Professor and
Professor of Veterinary Medicine

Volunteer Faculty

ADAMS, LESLIE R., M.D., (University of Pennsylvania)
Clinical Associate PRofessor/JEEP/Jacksonville

ANDERSON, GEORGE A., M.D., (Bowman Gray)
Clinical Associate Professor/JHEP/Jacksonville

ANDREWS, JOHN W., M.D., (Emory University)
Clinical Instructor/Gainesville

BAKER, ROY M., M.D., (Emory University)
Clinical Professor/JHEP/Jacksonville

BANNON, PATRICK, M.D., (Georgetown University)
Clinical Assistant Professor/JHEP/Jacksonville

BARROW, MARK V., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

BENSON, HARRY C., M.D., (Univ. of Illinois)
Clinical Associate Professor/JHEP/Jacksonville

BIRCH, LARRY, M.D., (University of Michigan)
Clinical Assistant Professor/JHEP/Jacksonville

BURNS, MARSHALL A., M.D., (Tulane University)
Clinical Associate Professor/JHEP/Jacksonville

CAHUE, ANTONIO R., M.D., (Havana Univ.)
Clinical Instructor/Orlando Regional Med. Center

CHINOY, DAVID A., M.D., (University of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

COOPER, GARY R., M.D., (Tulane University)
Clinical Assistant Professor/Gainesville

CURRY, R. CHARLES, M.D., (University of Florida)
Clinical Associate Professor/Orlando

DACE, MELVIN C., M.D., (Washington University)
Clinical Instructor/Gainesville

dE lA TORRE, ANGEL, M.D., (University of Havana)
Clinical Associate Professor/JHEP/Jacksonville

DILLAHUNT, PAUL, M.D., (Ohio State University)
Clinical Assistant Professor/JHEP/Jacksonville

DELLION, MICHAEL C., M.D., (Univ. of Kentucky)
Clinical Assistant Professor/Gainesville

EL SHAHAWY, MAHFOUZ, M.D., (Vienna Medical School)
Clinical Assistant Professor/Sarasota

FLEMING, JACK W., M.D., (Emory University)
Clinical Associate Professor/Pensacola

FULLER, EARL W., JR., M.D., (Medical College of Va.)
Clinical Assistant Professor/JHEP/Jacksonville

GILBERT, CLARENCE M., M.D., (Univ. of Pennsylvania)
Clinical Associate Professor/Orlando Regional Med. Center)

GILMOUR, KAY E., M.D., (University of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

GROSS, HOWARD E., M.D., (Univ. of Nebraska)
Clinical Assistant Professor/Orlando Regional Med. Center)

HANSON, KARL B., M.D., (University of Chicago)
Clinical Professor/JHEP/Jacksonville

HARTMANN, KAMILLO F., M.D., (Olomouc, Czech.)
Clinical Assistant Professor/JHEP/Jacksonville

HERRADA, RAUL J., M.D.,
(Univ. of Santiago de Compostela, Spain)
Clinical Instructor/Orlando Regional Med. Center)

IRA, GORDON H., JR., M.D., (Duke University)
Clinical Associate Professor/JHEP/Jacksonville

JACOBS, DANIEL M., M.D., (Duke University)
Clinical Assistant Professor/JHEP/Jacksonville

JOHNSON, Melvin J., Ph.D., (Tufts Univ.)
Clinical Assistant Professor/Orlando Regional Med. Center)

KANTER, LAWRENCE J., M.D., (Case Western Reserve)
Clinical Assistant Professor/JHEP/Jacksonville

LITTLEFORD, PHILIP O., M.D., (Johns Hopkins)
Clinical Associate Professor/Orlando

LOHRBAUER, LEIF A., M.D., (Duke University)
Clinical Assistant Professor/JHEP/Jacksonville

MADISON, WILLIAM M., JR., M.D., (Emory University)
Clinical Associate Professor/JHEP/Jacksonville

McCALLISTER, ARCHIE, M.D., (Emory University)
Clinical Associate Professor/Stuart

McINTOSH, HENRY D., M.D., (University of Pa.)
Clinical Professor/Lakeland

MINER, JAMES A., M.D., (Indiana School of Medicine)
Clinical Assistant Professor/JHEP/Jacksonville

MONTGOMERY, JAMES A., M.D., (Tulane University)
Clinical Assistant Professor JHEP Jacksonville

MYERS, JAMES W., M.D., (Ohio State University)
Clinical Assistant Professor JHEP Jacksonville

OLLIFF, BENJAMIN C., M.D., (Med. Col. of Ga.)
Clinical Assistant Professor JHEP Jacksonville

PAGE, E. EUGENE, JR., M.D., (Johns Hopkins)
Clinical Professor/JHEP Jacksonville

PARTAIN, JONATHAN O., M.D., (Vanderbilt Univ.)
Clinical Assistant Professor/Orlando Regional Med. Center)

PEELER, ROBERT G., M.D., (Johns Hopkins)
Clinical Assistant Professor/JHEP/Jacksonville

PEKAAR, ROBERT L., M.D., (New Jersey Medical School)
Clinical Assistant Professor JHEP Jacksonville

SAHAB, JOSEPH G., M.D., (French Faculty of Medicine)
Clinical Assistant Professor/Leesburg

SCHANG, STEVEN J., JR., M.D., (George Washington)
Clinical Assistant Professor Pensacola

SCHNEIDER, IRVIN C., M.D., (Tulane University)
Clinical Associate Professor JHEP/Jacksonville

SCHONBERG, ALLAN, M.D., (George Washington Univ.)
Clinical Assistant Professor JHEP/Jacksonville

SCHRANK, JOEL P., M.D., (Case Western Reserve)
Clinical Associate Professor/JHEP/Jacksonville

SILVERSTEIN, BURTON V., M.D., (Univ. of Pa.)
Clinical Assistant Professor/Gainesville

SINGER, LORNE A., M.D., (Toronto University)
Clinical Instructor/Gainesville

SNYDER, GARY J., M.D., (Rush Medical College)
Clinical Instructor/JHEP Jacksonville

SOLER, RAUL D., M.D., (University of Havana)
Clinical Assistant Professor/JHEP/Jacksonville

TEW, FRANKLIN T., M.D., (Univ. of North Carolina)
Clinical Assistant Professor/Orlando Regional Med. Center)

VAN CLEVE, ROBERT B., M.D., (Columbia University)
Clinical Professor/JHEP Jacksonville

WAINWRIGHT, W. RANDOLPH, M.D., (Med. Col. of Ga.)
Clinical Assistant Professor JHEP/Jacksonville

WILLIAMS, J. CURTIS, JR., M.D., (Bowman Gray)
Clinical Assistant Professor/Pensacola

Clinical Immunology

BLUMBERG, SCOTT, M.D., (Boston University)
Assistant Professor/JHEP

EDWARDS, N. LAWRENCE, M.D., (Univ. of Miami)
Assistant Professor

LONGLEY, SELDEN, III, M.D., (Vanderbilt University)
Associate Professor

* PANUSH, RICHARD S., M.D., (University of Michigan)
Associate Professor and Chief and Associate Professor of Immunology and Medical Microbiology

Volunteer Faculty

CALDWELL, JACQUES R., M.D., (Johns Hopkins)
Clinical Associate Professor/Gainesville

GARTEN, LEONARD, M.D., (Medical College of Georgia)
Clinical Assistant Professor/JHEP Jacksonville

KOHEN, MICHAEL D., M.D., (University of Florida)
Clinical Assistant Professor/Daytona Beach

MASS, MYRON F., M.D., (University of Florida)
Clinical Associate Professor/JHEP Jacksonville

NEWMAN, MELVIN, M.D., (Boston University)
Clinical Associate Professor/JHEP Jacksonville

SALES, LOUIS M., M.D., (Boston University)
Clinical Professor/JHEP/Jacksonville

STROUD, ROBERT M., M.D., (Harvard)
Clinical Professor/Ormond Beach

Dermatology

CHILDERS, RICHARD C., M.D., (University of Rochester)
Assistant Professor

CULLEN, STANLEY I., M.D., (University of Miami)
Associate Professor

FLOWERS, FRANKLIN P., M.D., (Univ. of Florida)
Assistant Professor and Chief

SHERERTZ, ELIZABETH F., M.D., (Univ. of Virginia)
Assistant Professor

Volunteer Faculty

Honigman, Joseph, M.D., (Jefferson Med. Col.)
Adjunct Associate Professor/JHEP/Jacksonville

SLAZINSKI, LEONARD, M.D., (Jefferson Med. Col.)
Clinical Instructor/Sarasota

SMITH, EDWARD W.P., M.D., (Ohio State Univ.)
Clinical Assistant Professor/JHEP Jacksonville

Volunteer Faculty

TRIMBLE, JAMES W., M.D., (Univ. of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

WILKERSON, RUTH C., M.D., (Med. Col. of Va.)
Clinical Instructor/Gainesville

Endocrinology and Metabolism

CHALLONER, DAVID R., M.D., (Harvard Medical College)
Professor and Vice President for Health Affairs

* FISHER, WALDO R., M.D., Ph.D., (Univ. of Pennsylvania)
Professor

* FREUND, GERHARD, M.D., (Goethe University)
Professor and Professor of Neuroscience

GREEN, ALLAN, Ph.D., (Oxford Univ.)
Assistant Research Scientist

MACLAREN, NOEL K., M.D., (Univ. of Otago, New Zealand)
Professor and Professor of Pediatrics and Pathology

MERIMEE, THOMAS J., M.D., (University of Louisville)
Professor and Chief

MISBIN, ROBERT I., M.D., (Johns Hopkins)
Associate Professor

MURRAY, FREDERICK T., M.D., (Hahnemann Med. Col.)
Assistant Professor

PATTERSON, BRUCE W., Ph.D., (Univ. of Illinois)
Assistant Research Scientist

ROQUE, JOHN L., M.D., (University of Seville)
Associate Professor and Division Chief/JHEP

STACPOOLE, PETER W., M.D., Ph.D., (Vanderbilt)
Assistant Professor

THOMAS, WILLIAM C., JR., M.D., (Cornell University)
Professor, Associate Chief of Staff for Research/VAMC

Volunteer Faculty

BUCHER, ROBERT L., M.D., (University of Minnesota)
Clinical Assistant Professor/JHEP/Jacksonville

COBLE, YANK D., JR., M.D., (Duke University)
Clinical Professor/JHEP/Jacksonville

CROCKETT, SAMUEL E., M.D., (Ohio State Univ.)
Clinical Assistant Professor/Orlando Regional Med. Center)

KNIZLEY, HOMER, JR., M.D., (University of Florida)
Clinical Associate Professor/Gainesville

LONDONO, JAVIER H., M.D., (University of Antioquia)
Clinical Assistant Professor/Gainesville

LOWENTHAL, JOSEPH J., M.D., (Univ. of Pennsylvania)
Clinical Professor/JHEP/Jacksonville

MILLER, ROBERT, M.D., (University of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

MONTGOMERY, CHARLES T., M.D., (Univ. of Miami)
Clinical Associate Professor/JHEP/Jacksonville

OATES, THOMAS W., M.D., (Ohio State University)
Clinical Assistant Professor/Lakeland

PUESTOW, ERIC CHARLES, M.D., (Univ. of Wisconsin)
Clinical Assistant Professor/JHEP/Jacksonville

SCHWALBE, FRANK C., JR., M.D., (Emory University)
Clinical Associate Professor/JHEP/Jacksonville

Gastroenterology

* CERDA, JAMES J., M.D., (University of Maryland)
Professor and Associate Chairman

HARTY, RICHARD F., M.D., (Georgetown University)
Associate Professor

KING, CHARLES E., JR., M.D., (Bowman Gray)
Associate Professor

KOLTS, BYRON E., M.D., (University of Rochester)
Associate Professor and Division Chief/JHEP

MATHIAS, JOHN R., M.D., (Temple University)
Associate Professor

* McGUIGAN, JAMES E., M.D., (St. Louis University)
Professor and Chairman and Professor of Immunology and Medical Microbiology

SNINSKY, CHARLES A., M.D., (Temple University)
Assistant Professor

* TOSKES, PHILLIP P., M.D., (University of Maryland)
Professor and Chief

WOLFE, M. MICHAEL, M.D., (Ohio State University)
Assistant Professor

Volunteer Faculty

BONE, FRANK C., M.D., (Duke University)
Clinical Asssistant Professor/Orlando Regional Med. Center)

BORLAND, JAMES L., JR., M.D., (Johns Hopkins)
Clinical Professor/JHEP/Jacksonville

BUELOW, ROBERT G., M.D., (Temple University)
Clinical Assistant Professor/JHEP/Jacksonville

DEFORD, JAMES W., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

GOLDBERG, LAWRENCE S., M.D., (New York University)
Clinical Assistant Professor/JHEP/Jacksonville

GROOVER, JACK R., M.D., (University of Maryland)
Clinical Associate Professor/JHEP/Jacksonville

HANCOCK, W. ROY, M.D., (Medical College of Georgia)
Clinical Professor/JHEP/Jacksonville

KANNER, ROBERT S., M.D., (Creighton University)
Clinical Instructor/JHEP/Jacksonville

KRAMER, DEAN C., M.D., (University of Missouri)
Clinical Assistant Professor/Gainesville

LANGFITT, MURRY L., M.D., (University of Iowa)
Adjunct Professor/JHEP/Jacksonville

LEIBACH, JOHN R., M.D., (Ohio State University)
Clinical Assistant Professor/Gainesville

MORRIS, WALTER E., JR., M.D., (Univ. of Alabama)
Clinical Associate Professor/JHEP/Jacksonville

TEK, HONG TAING, M.D., (University of Phnom-Penh)
Clinical Assistant Professor/JHEP/Jacksonville

ULEMAN, EDWARD R., M.D., (Johns Hopkins)
Clinical Instructor/Orlando Regional Med. Center

WIDNER, VICTOR R., M.D., (Kansas Univ. Sch. of Med.)
Clinical Instructor/JHEP/Jacksonville

Hematology

KEITT, ALAN S., M.D., (Harvard University)
Associate Professor and
Associate Professor of Pathology

KITCHENS, CRAIG S., M.D., (University of Florida)
Associate Professor and Associate Professor of Pathology

LOTTENBERG, RICHARD, M.D., (University of Florida)
Assistant Professor

MARKS, ALAN R., M.D., (University of Brussels, Belgium)
Assistant Professor/JHEP

NOYES, WARD D., M.D., (University of Rochester)
Professor and Chief

STREIFF, RICHARD R., M.D., (University of Basel)
Professor and Chief of Medical Services/VAMC

WHITTINGTON, RICHARD M., M.D. (Jefferson)
Professor and Chief of Staff/VAMC

Volunteer Faculty

ABRAMSON, NEIL, M.D., (Albert Einstein)
Clinical Professor/JHEP/Jacksonville

ANDERSON, AXEL, M.D., (Univ. of Buffalo)
Clinical Assistant Professor/Orlando Regional Med. Center)

BROWN, CLARENCE H., III, M.D., (Emory University)
Clinical Assistant Professor/Orlando Regional Med. Center)

DUNN, PHILIP H., M.D., (Duke University)
Clinical Assistant Professor/Orlando Regional Med. Center)

KEENE, WILLIS R., M.D., (Johns Hopkins)
Clinical Professor/Folkston, Georgia

MOOMAW, DAVID R., M.D., (Northwestern University)
Clinical Associate Professor/JHEP/Jacksonville

PAWLIGER, DAVID F., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

TROTTER, GEORGE S., M.D., (University of Maryland)
Clinical Associate Professor/JHEP/Jacksonville

Infectious Diseases

DEAL, WILLIAM B., M.D., (Univ. of North Carolina)
Dean, College of Medicine and Associate
Vice President for Clinical Affairs;
Professor of Medicine, Immunology and Medical Microbiology, Pharmacy Practice and Joint Professor of Community Health and Family Medicine

FOSTER, MALCOLM T., M.D., (Bowman Gray)
Professor and
Associate Chairman for Jacksonville Programs

MARSTON, ROBERT Q., M.D., (Med. Col. of Va.)
Professor and President of University

MICHAEL, MAX, JR., M.D., (Harvard University)
Professor and Assistant Vice President for Health Affairs/JHEP

RAMPHAL, REUBEN, M.D., (McGill University)
Assistant Professor and Assistant Professor of Immunology and Medical Microbiology

* RAND, KENNETH H., M.D., (Stanford University)
Associate Professor and Assistant Professor of Immunology and Medical Microbiology

* SHANDS, JOSEPH W., JR., M.D., (Duke University)
Professor and Chief and Professor of Immunology and Medical Microbiology

SHERERTZ, ROBERT J., M.D., (University of Virginia)
Assistant Professor

Volunteer Faculty

JURGENSEN, PAUL F., M.D., (St. Louis University)
Clinical Associate Professor/Savannah, Georgia

MANSHEIM, BERNARD J., M.D., (Univ. of Wisconsin)
Clinical Assistant Professor/Gainesville

MAUCERI, ARTHUR A., M.D., (Georgetown University)
Clinical Assistant Professor/Gainesville

SIEGER, BARRY E., M.D., (Boston University)
Clinical Assistant Professor/Orlando

THOBURN, ROBERT, M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

VANDEVELDE, ALEXANDER G., M.D.,
(Univ. of Louvain)
Clinical Associate Professor/JHEP/Jacksonville

Nephrology

* CADE, J. ROBERT, M.D., (Univ. of Texas-Southwestern)
Professor

DILLEY, JAMES R., M.D., (West Virginia University)
Assistant Professor

MADSEN, KIRSTEN, M., M.D., (Aarhus, Denmark)
Assistant Professor

MARS, DONALD R., M.D., (University of Miami)
Associate Professor

MORFORD, DONALD W., M.D., (University of Kentucky)
Instructor/JHEP

PETERSON, JOHN C., M.D., (University of Florida)
Assistant Professor

TISHER, C. CRAIG, M.D., (Washington University)
Professor and Chief

WINGO, CHARLES S., M.D., (Louisiana State)
Assistant Professor

Volunteer Faculty

DAVIS, ROBERT G., M.D., (Univ. of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

FULLER, THOMAS J., M.D., (Northwestern Univ.)
Clinical Associate Professor/Ocala

GREGORY, LOUIS F., JR., M.D., (Univ. of Mississippi)
Clinical Assistant Professor/JHEP/Jacksonville

HAYES, CHARLES P., JR., M.D., (Duke University)
Clinical Associate Professor/JHEP/Jacksonville

MAHONEY, JAMES J., JR., M.D., (Univ. of Florida)
Clinical Assistant Professor/Gainesville

MARBURY, THOMAS C., M.D., (Univ. of Texas-Houston)
Clinical Assistant Professor/Orlando Regional Med. Center)

SANDRONI, STEPHEN E., M.D., (New York Med. Col.)
Adjunct Assistant Professor/JHEP/Jacksonville

TARRANT, DARRELL G., M.D., (University of Kentucky)
Clinical Assistant Professor/Gainesville

Oncology

ELFENBEIN, GERALD J., M.D., (Johns Hopkins)
Associate Professor

KRAMER, BARNETT S., M.D., (University of Maryland)
Associate Professor

McCARLEY, DEAN L., M.D., (Duke University)
Assistant Professor

OBLON, DAVID J., M.D., (University of Pennsylvania)
Assistant Professor

ROSS, WARREN E., M.D., (University of Florida)
Associate Professor and
Associate Professor of Pharmacology and Therapeutics

* WEINER, ROY S., M.D., (SUNY-Downstate)
Professor and Chief;
Professor of Immunology and Medical Microbiology

ZUCALI, JAMES R., Ph.D., (New York Univ.)
Assistant Professor

Volunteer Faculty

CUSUMANO, CHARLES L, M.D., (Georgetown Univ.)
Clinical Associate Professor/Gainesville

STECHMILLER, BRUCE K., M.D., (Johns Hopkins)
Clinical Assistant Professor/Gainesville

Pulmonary Medicine

* BLOCK, A. JAY, M.D., (Johns Hopkins)
Professor and Chief, and Professor of Anesthesiology

BLOCK, EDWARD R., M.D., (Johns Hopkins)
Professor

* BOYSEN, PHILIP G., M.D., (Loyola-Stritch)
Associate Professor and
Associate Professor of Anesthesiology

GONZALEZ-ROTHI, RICARDO J., M.D., (New York Univ.)
Assistant Professor

HARMAN, ELOISE M., M.D., (Johns Hopkins)
Associate Professor

* HARRIS, J. OCIE, M.D., (University of Mississippi)
Professor and Chief/VAMC

PATEL, JAWAHARLAL M., Ph.D., (Marathawanda University)
Assistant Research Scientist

RYERSON, EUGENE G., M.D., (New Jersey Medical School)
Assistant Professor

SCHOONOVER, GEORGE A., M.D., (Penn State)
Assistant Professor/JHEP

* ZAUNER, CHRISTIAN W., Ph.D., (Southern Ill. Univ.)
Professor and Professor of Physical Education

Volunteer Faculty

AUERBACH, DAVID, M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

COLEY, P. ANDREW, JR., M.D., (University of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

EYE, E. HOWARD, JR., M.D., (West Virginia University)
Clinical Assistant Professor/JHEP/Jacksonville

GREENBERG, ROBERT A., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

HENDERSON, FRANK W., M.D., (Jefferson Med. Col.)
Clinical Assistant Professor/Lake City

JACKLER, IRA M., M.D., (University of Oklahoma)
Clinical Assistant Professor/JHEP/Jacksonville

MOOREHEAD, JOHN M., M.D., (Medical College of Ohio)
Clinical Assistant Professor/JHEP/Jacksonville

REID, RICHARD A., M.D., (Indiana University)
Clinical Associate Professor/JHEP/Jacksonville

SHARPE, ISABELLA K., M.D., (Med. Col. of Pa.)
Clinical Assistant Professor/JHEP/Jacksonville

SNYDER, ROBERT C., M.D., (Univ. of Pittsburgh)
Clinical Assistant Professor/Orlando Regional Med. Center)

VARRAUX, ALAN R., M.D., (Temple Univ.)
Clinical Assistant Professor/Orlando Regional Med. Center)

WYNNE, JAMES W., M.D., (Cornell University)
Clinical Associate Professor/Gainesville

NEUROLOGICAL SURGERY

BREMER, ALFONSO M., M.D., (Univ. Nat'l Autonoma)
Professor/JHEP

DAY, ARTHUR L., M.D., (Louisiana State University)
Associate Professor

FRIEDMAN, WILLIAM A., M.D., (Ohio State University)
Assistant Professor; Assistant Professor, Neuroscience

GARCIA-BENGOCHEA, FRANCISCO, M.D., (Tulane University)
Distinguished Service Professor Emeritus

MICKLE, J. PARKER, M.D., (Vanderbilt University)
Associate Professor and Associate Professor, Pediatrics

NGUYEN, TAI QUYEN, M.D., (University of Saigon)
Assistant Professor/JHEP

RHOTON, ALBERT L., JR., M.D., (Washington University)
R. D. Keene Family Professor and Chairman

* SYPERT, GEORGE W., M.D., (Univ. of Washington)
Professor and Chief of Neurological Surgery VAMC
and Professor, Neuroscience

Volunteer Faculty

BIRD, C. ASHLEY, M.D., (Emory University)
Clinical Assistant Professor/JHEP Jacksonville

BOGGS, JOHN S., M.D., (University of Michigan)
Clinical Assistant Professor/JHEP Jacksonville

CAUTHEN, JOSEPH C., M.D., (Duke University)
Clinical Associate Professor Gainesville

FREEMAN, JAMES V., M.D., (University of Tennessee)
Clinical Assistant Professor Gainesville

GOMEZ, JAIME G., M.D., (National Univ. of Colombia)
Adjunct Professor Gainesville

HUDSON, CALVIN H., M.D., (University of Tennessee)
Clinical Associate Professor/JHEP Jacksonville

MAULDIN, RONALD L., M.D., (University of N.C.)
Clinical Assistant Professor Gainesville

ZEAL, ARNOLD A., M.D., (University of Manitoba)
Clinical Instructor/JHEP Jacksonville

ZENGEL, JANET B., Ph.D., (Univ. of Miami)
Adjunct Assistant Professor Gainesville

NEUROLOGY

ANDRIOLA, MARY R., M.D., (Duke University)
Associate Professor

BOWERS, DAWN, Ph.D., (University of Florida)
Assistant Professor and
Associate Professor of Clinical Psychology

CORWIN, JAMES V., Ph.D., (University of Kentucky)
Assistant Research Scientist

GONZALEZ-ROTHI, LESLIE, Ph.D., (University of Florida)
Visiting Assistant Professor of Neurology and
Communicative Disorders

GREER, MELVIN, M.D., (New York University)
Professor and Chairman of Neurology
and Professor of Pediatrics

* HEILMAN, KENNETH M., M.D., (University of Virginia)
Professor and Director of Neurology

MUSELLA, LILLI, Ph.D., (McGill University)
Assistant Professor

RUSSO, LOUIS, M.D., (New York University)
Assistant Professor and Associate Chairman
for Jacksonville Programs
Assistant Dean for Jacksonville Programs

VALENSTEIN, EDWARD, M.D., (Albert Einstein)
Professor and Chief of Neuromuscular Service

WATSON, ROBERT T., M.D., (University of Florida)
Professor of Neurology and Neuroscience

WALSH, DAVID J., M.D., (Med. Univ. of South Carolina)
Assistant Professor of Neurology and Pediatrics/JHEP

* WILDER, BUNA JOE, M.D., (Duke University)
Professor

Volunteer Faculty

BERCAW, BEAUREGARD L., M.D., (Univ. of Va.)
Clinical Assistant Professor/Clearwater

CUNNINGHAM, RICHARD W., M.D., (Univ. of Florida)
Clinical Assistant Professor of Neurology and
Medicine/Gainesville

DESHUMKH, VINOD D., M.D., (India)
Clinical Assistant Professor/JHEP Jacksonville

FEUSSNER, GEORGE G., M.D., (Univ. of Pittsburgh)
Clinical Assistant Professor/Gainesville

FISHER, NORMA P., (University of Florida)
Joint Associate Professor/Gainesville

GIPSON, AMOS C., M.D., (Vanderbilt University)
Clinical Instructor/Tampa

GREEN, JACOB, M.D., (University of Alabama)
Clinical Associate Professor/JHEP/Jacksonville

HARRISON, THOMAS H., M.D., (Duke University)
Clinical Instructor/Tampa

HAYCOOK, WILLIAM M., M.D., (University of Virginia)
Clinical Assistant Professor/JHEP/Jacksonville

HOWELL, GREGORY J., M.D., (University of Florida)
Clinical Assistant Professor/Ocala

HUDGINS, ROBERT, M.D., (Med. Col. of Virginia)
Clinical Assistant Professor/JHEP/Jacksonville

KILGORE, MANLEY W., M.D. (U.C.L.A.)
Clinical Assistant Professor/JHEP/Jacksonville

KOHLER, WILLIAM C., M.D., (University of Florida)
Clinical Assistant Professor/Tallahassee

LOPEZ, RAUL L., M.D. (University of Florida)
Clinical Associate Professor/Miami

MALZONE, WILLIAM F., M.D., (University of Florida)
Clinical Assistant Professor/Lakeland

MILLER, BAYARD, D., M.D., (University of Florida)
Clinical Assistant Professor/Pensacola

MOUAT, WILLIAM D., M.D., (University of Pittsburgh)
Clinical Assistant Professor/Gainesville

NEALIS, JAMES, M.D., (University of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

NG, CHI-KIN, M.D., (Taiwan)
Clinical Assistant Professor/Ocala

POHLMAN, GLENN L., M.D., (University of Minnesota)
Clinical Assistant Professor/JHEP/Jacksonville

QUICK, DONALD T., M.D., (Case Western Reserve)
Clinical Associate Professor/Gainesville

RAY, WALTER F., M.D., (University of Florida)
Clinical Assistant Professor/Ocala

ROSS, JOHN J., M.D., (Harvard Medical School)
Joint Professor/Gainesville

ROTTMANN, ANNE L., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

SCHWARTZ, HARVEY D., M.D., (University of Florida)
Clinical Assistant Professor/Boca Raton

SHAW, DAVID L., M.D., (University of Arkansas)
Clinical Assistant Professor/Pensacola

SLADE, GEORGE F., M.D., (Emory University)
Clinical Assistant Professor/Tallahassee

THORNTON, ROBERT S., M.D., (Emory University)
Clinical Assistant Professor/Pensacola

VROOM, FREDERICK Q., M.D., (University of Florida)
Clinical Associate Professor/Tallahassee

WROE, MARTHA C., M.A., (Stanford University)
Joint Associate Professor/Gainesville

NEUROSCIENCE

* ACHE, BARRY W., Ph.D., (Univ. of California-Santa Barbara)
Affiliate Associate Professor of Neuroscience
Associate Professor of Zoology

* ANGELIDES, KIMON J., Ph.D., (Univ. of California-Santa Cruz)
Affiliate Assistant Professor of Neuroscience and
Assistant Professor of Biochemistry and Molecular Biology

* BROWNELL, WILLIAM E., Ph.D., (University of Chicago)
Associate Professor

CHILDERS, STEVEN R., Ph.D., (University of Wisconsin)
Assistant Professor of Neuroscience and Pharmacology

COOPER, BRIAN Y., Ph.D., (University of Florida)
Assistant Research Scientist of Neuroscience

CORWIN, JAMES V., Ph.D., (University of Kentucky)
Affiliate Assistant Research Scientist of Neuroscience
Assistant Research Scientist of Neurology

* DAWSON, WILLIAM W., Ph.D., (Florida State University)
Affiliate Professor of Neuroscience
Professor of Ophthalmology and Physiology

* DUNN, ADRIAN J., Ph.D., (University of Cambridge)
Associate Professor

* FREUND, GERHARD, M.D., (J. W. Goethe University)
Professor of Neuroscience and Medicine

* HEATON, MARIETA B., Ph.D., (N.C. State University)
Associate Professor

HUNTER, BRUCE E., Ph.D., (University of Florida)
Assistant Research Scientist

* KING, ROBERT L., Ph.D., (Johns Hopkins)
Associate Professor

* LEONARD, CHRISTIANA M., Ph.D., (M.I.T.)
Associate Professor

* LUTTGE, WILLIAM G., Ph.D., (Univ. of Calif.-Irvine)
Professor and Chairman

* MAHAN, PARKER E., D.D.S., Ph.D.
(Emory University; University of Rochester)
Professor of Neuroscience and Professor and Chairman,
Department of Basic Dental Sciences

* MUNSON, JOHN B., Ph.D., (University of Rochester)
Professor

REEP, ROGER L., Ph.D., (Michigan State University)
Assistant Research Scientist

* SYPERT, GEORGE W., M.D., (University of Washington)
Professor of Neuroscience and Neurological Surgery

* THOMPSON, FLOYD J., Ph.D., (Indiana University)
Associate Professor of Neuroscience and
Associate Professor of Veterinary Medicine

* ULSHAFER, ROBERT J., Ph.D., (Pennsylvania State Univ.)
Affiliate Assistant Professor of Neuroscience
Assistant Professor of Ophthalmology

* VAN HARTESVELDT, CAROL J., Ph.D.,
(University of Rochester)
Associate Professor of Neuroscience and
Associate Professor of Psychology

* VIERCK, CHARLES J., JR., Ph.D., (Univ. of Florida)
Professor

* WALKER, DON W., Ph.D., (Texas Christian University)
Professor/VAMC

ZENGEL, JANET E., Ph.D., (University of Miami)
Adjunct Assistant Professor of Neuroscience

OBSTETRICS AND GYNECOLOGY

ABRAMS, ROBERT M., Ph.D., D.D.S., (Univ. of Pa.)
Associate Professor

BARRON, DONALD H., Ph.D., (Yale University)
Professor

BENRUBI, GUY I., M.D., (SUNY-Brooklyn)
Assistant Professor/JHEP

BRACKBILL, YVONNE, Ph.D., (Stanford)
Jt. Graduate Research Professor and
Graduate Research Professor of Psychology

BUHI, WILLIAM C., Ph.D., (University of Florida)
Assistant Professor

CATON, DONALD, M.D., (Columbia University)
Jt. Professor and Professor of Anesthesiology

CRUZ, AMELIA C., M.D., (Far Eastern University)
Associate Professor

DEVANE, GARY W., M.D., (Baylor College of Medicine)
Assistant Professor

DOCKERY, J. LEE, M.D., (University of Arkansas)
Professor and Associate Dean

FERGUSON, KAREN L., M.D., (University of Missouri)
Assistant Professor

FRIEDRICH, EDUARD G., JR., M.D., (Johns Hopkins)
Professor and Chairman

GIBBS, CHARLES P., M.D., (Indiana University)
Jt. Professor and Professor of Anesthesiology and
Assistant Dean for Curriculum

HARDT, NANCY S., M.D., (Loyola University)
Assistant Professor

HILL, HUGH M., M.D., (Johns Hopkins)
Professor and Associate Dean for Student and
Alumni Affairs

JOHNSON, JOHN W. C., M.D., (Univ. of Virginia)
Professor

KALRA, PUSHPA S., Ph.D., (University of Delhi, India)
Associate Professor

KALRA, SATYA P., Ph.D., (University of Delhi, India)
Professor

KELLNER, KENNETH R., M.D., Ph.D., (SUNY-Downstate)
Assistant Professor

MAHAN, CHARLES S., M.D., (Northwestern University)
Professor

MONIF, GILLES R. G., M.D., (Boston University)
Associate Professor

MORGAN, LINDA S., M.D., (Medical Col. of Pennsylvania)
Assistant Professor

NOTELOVITZ, MORRIS, M.D., Ph.D.,
(University of Witwatersrand, Johannesburg, South Africa)
Professor and Director, Center for Climacteric Studies

NUSS, ROBERT C., M.D., (Thomas Jefferson)
Associate Professor JHEP

O'LEARY, JAMES A., M.D., (Georgetown University)
Professor JHEP

RIGGALL, FRANK C., M.D., (Univ. of West Virginia)
Associate Professor

THOMPSON, ROBERT J., M.D., (Wayne State University)
Professor and Associate Chairman for Jacksonville Programs

VON MERING, OTTO, Ph.D., (Harvard)
Jt. Professor and Professor of Anthropology

WILKINSON, EDWARD, J., M.D., (Med. Col. of Wis.)
Jt. Professor and Professor of Pathology

Volunteer Faculty

ALLGOOD, JACKSON L., JR., M.D., (University of Miami)
Clinical Associate Professor/JHEP/Jacksonville

BANCROFT, JOE W., JR., M.D., (University of Miami)
Clinical Associate Professor/JHEP/Jacksonville

BEADLING, LESLIE W., M.D., (Temple University)
Clinical Associate Professor/JHEP/Jacksonville

CARSON, DORIS N., M.D., (Ohio State University)
Clinical Associate Professor/JHEP/Jacksonville

FERRELL, ROGER ERNEST, M.D., (University of Florida)
Adj. Assistant Professor JHEP/Jacksonville

FRIEDLAND, DAVID P., M.D., (Temple University)
Clinical Associate Professor JHEP/Jacksonville

GILLILAND, CHARLES H., M.D., (University of Iowa)
Clinical Professor/Gainesville

GLENN, J. EUGENE, M.D., (Univ. of North Carolina)
Clinical Associate Professor/JHEP/Jacksonville

HAGEL, DONALD R., M.D., (University of Nebraska)
Clinical Associate Professor/JHEP/Jacksonville

HALL, DOUGLAS C., M.D., (University of Florida)
Clinical Instructor/Ocala

HARDMAN, ALVIN A., M.D., (University of Florida)
Clinical Associate Professor/Gainesville

HAYES, JAMES FRANKLIN, JR., M.D., (Univ. of Tenn.)
Clinical Associate Professor/JHEP/Jacksonville

KIRBY, TAYLOR H., M.D., (George Washington Univ.)
Clinical Associate Professor/Gainesville

LUKOWSKI, MICHAEL J., M.D., (University of Florida)
Clinical Instructor/Gainesville

MAYER, GEORGE L., M.D., (University of Arkansas)
Clinical Instructor/JHEP/Jacksonville

McDOWELL, RICHARD W., M.D., (Univ. of Pennsylvania)
Clinical Professor/JHEP/Jacksonville

McNEILL, H. WYATT, M.D., (University of Miami)
Clinical Professor/JHEP/Jacksonville

MEIN, ROBERT M., M.D., (University of Louisville)
Clinical Associate Professor/JHEP/Jacksonville

MOJADIDI, QUDRATULLAH, M.D., (Kabul University)
Clinical Associate Professor/JHEP/Jacksonville

OBERDORFER, PAUL W., M.D., (Tulane University)
Clinical Assistant Professor/JHEP/Jacksonville

PHELAN, WILLIAM J., M.D., (Georgetown University)
Clinical Associate Professor/JHEP/Jacksonville

PHILLIPS, CURTIS M., M.D., (Medical College of Georgia)
Clinical Associate Professor/JHEP/Jacksonville

PLATOCK, GERALD M., M.D., (Medical College of Georgia)
Clinical Associate Professor/JHEP/Jacksonville

ROSIN, ALEXANDER P., M.D., (Tulane University)
Clinical Assistant Professor/JHEP/Jacksonville

RUST, WILBUR C., M.D., (Albany Medical College)
Clinical Assistant Professor/JHEP/Jacksonville

SCHOENFELD, ORENE, M.D., (University of Florida)
Clinical Associate Professor/Gainesville

STEIN, DANIEL S., M.D., (Wayne State)
Clinical Associate Professor/St. Petersburg

SUTER, MAX, M.D., (Tulane University)
Clinical Professor/JHEP/Jacksonville

WILLIAMS, BRADFORD T., M.D., (University of Florida)
Clinical Instructor/Gainesville

OPHTHALMOLOGY

CASSIN, BARBARA C., M.S., (University of Florida)
Assistant Ophthalmologist

* DAWSON, WILLIAM W., Ph.D., (Florida State Univ.)
Professor

ENGEL, HARRY M., M.D., (New York Med. College)
Assistant Professor

GUY, JOHN, M.D., (University of Miami)
Assistant Professor

ROMANO, PAUL E., M.D., (Cornell University)
Professor

RUBIN, MELVIN L, M.D., (Univ. of Calif.-San Francisco)
Professor and Chairman

STEPHENSON, GARY, M.D., (Washington University)
Assistant Professor and Associate Chairman for Jacksonville Programs

STERN, GEORGE A., M.D., (U.C.L.A.)
Assistant Professor

STRATTON, ROBERT D., M.D., (Univ. of N.C.)
Assistant Professor

Volunteer Faculty

AINSWORTH, WILLIAM N., M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

ANDERSON, WILLIAM H., M.D., (Univ. of Chicago)
Clinical Assistant Professor/Ocala

BELYEU, JESSE H., M.D., (Tulane University)
Clinical Assistant Professor/JHEP/Jacksonville

BLOOM, JEFFREY N., M.D., (NYU School of Medicine)
Clinical Assistant Professor/JHEP/Jacksonville

CLOWER, JAMES W., M.D., (University of Georgia)
Clinical Assistant Professor/Daytona Beach

DRYFUSS, JOHN A., M.D., (NY Med. College)
Clinical Assistant Professor/Gainesville

DUKES, EARLE T., M.D., (Emory University)
Clinical Assistant Professor/Lakeland

GILBERT, WALTER R., M.D., (Duke University)
Clinical Assistant Professor/JHEP/Jacksonville

GLOTFELTY, JOHN, M.D., (University of Louisville)
Clinical Assistant Professor/Lakeland

HAZOURI, GERALD C., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

HERRON, WARREN, M.D., (University of Tennessee)
Clinical Assistant Professor/Pensacola

HONIG, ALAN J., M.D., (Univ. of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

HOUSTON, WILLIAM H., M.D., (University of Georgia)
Clinical Professor/JHEP/Jacksonville

LESTER, ROBERT H., M.D., (Medical College of Georgia)
Clinical Assistant Professor/JHEP/Jacksonville

LUCAS, HOWARD C., M.D., (Cornell University)
Clinical Assistant Professor/Winter Haven

MAGRUDER, GEORGE B., M.D., (Emory University)
Clinical Assistant Professor/Orlando

MARSHALL, WALTER H., JR., M.D., (Univ. of Fla.)
Clinical Assistant Professor/Gainesville

NICOLITZ, ERNST, M.D., (University of New Mexico)
Clinical Assistant Professor/JHEP/Jacksonville/Gainesville

PINKOSON, CHARLES, M.D., (Tulane University)
Clinical Assistant Professor/Gainesville

ROBBINS, JAMES E., M.D., (Emory University)
Clinical Assistant Professor/Gainesville

ROSE, HOWARD N., M.D., (Chicago Medical School)
Clinical Professor/JHEP/Jacksonville

SCHNAUSS, ROY H., M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

SIMMONS, RICHARD L., M.D., (Indiana University)
Clinical Assistant Professor/JHEP/Jacksonville

SMITH, DONALD L., M.D., (Jefferson Medical College)
Clinical Assistant Professor/Ocala

STAMAN, JAMES A., M.D., (Temple University)
Clinical Assistant Professor/JHEP/Jacksonville

VAN ARNAM, CARL E., M.D., (Univ. of Oregon)
Clinical Assistant Professor/Gainesville

WOLCHOK, EUGENE B., (SUNY-Buffalo)
Clinical Assistant Professor/JHEP/Jacksonville

ORTHOPAEDICS

BITTAR, EDWARD S., M.D., (University of Florida)
Assistant Professor

* BURCHARDT, HANS, Ph.D., (University of Florida)
Associate Professor

DELL, PAUL C., M.D., (University of Florida)
Associate Professor

* ENNEKING, WILLIAM F., (University of Wisconsin)
Distinguished Service Professor

GEAREN, PETER F., M.D., (University of Florida)
Assistant Professor

GLOWCZEWSKIE, FRANK P., AS/AA, (Univ. of Florida)
Assistant In Orthopaedics

HOROWITZ, MARSHALL, M.D., (University of Basel)
Associate Professor and Associate Chairman for Jacksonville Programs

INDELICATO, PETER A., M.D., (N.Y. Medical College)
Associate Professor

MILLER, GARY J., Ph.D., (University of Florida)
Assistant Professor/Bioengineering

PETTY, R. WILLIAM, M.D., (University of Arkansas)
Professor and Chairman

SPANIER, SUZANNE S., M.D., (University of Florida)
Associate Professor

SPRINGFIELD, DEMPSEY S., M.D., (Univ. of Florida)
Associate Professor

TYLKOWSKI, CHESTER M., M.D., (University of Illinois)
Assistant Professor

Volunteer Faculty

BINSKI, JAMES C., M.D., (Stritch School of Medicine)
Clinical Instructor/JHEP Jacksonville

BRADY, LOUIS P., M.D., (Emory University)
Clinical Assistant Professor/Winter Park

CLARKE, RUSSELL P., JR., M.D., (St. Louis University)
Clinical Instructor/JHEP Jacksonville

CROFT, CARL L., M.D., (Duke University)
Clinical Instructor/Winter Park

DYER, JAMES W., M.D., (Univ. of Oklahoma)
Clinical Instructor/JHEP/Jacksonville

FIPP, GEORGE J., M.D., (Indiana University)
Clinical Instructor/JHEP/Jacksonville

FRY, RICHARD M., M.D., (Temple University)
Clinical Assistant Professor/Gainesville

GILLESPY, THURMAN, JR., M.D., (Jefferson Medical Col.)
Clinical Instructor/Daytona Beach

GREEN, C. STANTON, M.D., (University of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

HOCKER, JOHN T., M.D., (University of Kansas)
Clinical Associate Professor/JHEP/Jacksonville

HOGSHEAD, HOWARD P., M.D., (University of Iowa)
Clinical Associate Professor/JHEP/Jacksonville

HUDSON, TERRY M., M.D., (Duke University)
Affiliate Assistant Professor/Gainesville

LACEY, JAMES A., M.D., (Medical College of Georgia)
Clinical Instructor/Winter Park

LOVEJOY, JOHN F., JR., M.D., (University of Florida)
Clinical Instructor/JHEP/Jacksonville

MARCH, ALLAN W., M.D., (Johns Hopkins University)
Joint Assistant Professor/Gainesville

MARSH, BURTON W., M.D., (University of Florida)
Clinical Instructor/Ocala

MOORE, THOMAS H., JR., M.D., (University of Florida)
Clinical Instructor/Gainesville

MORSE, SEYMOUR, M.D., (Long Island Col. of Medicine)
Clinical Assistant Professor/JHEP/Jacksonville

NIXON, JOSEPH J., M.D., (Medical College of Georgia)
Clinical Instructor/Winter Park

PARR, PHILLIP L., M.D., (Vanderbilt Medical School)
Clinical Instructor/Gainesville

PIOTROWSKI, GEORGE, Ph.D., (Case Western Reserve)
Affiliate Associate Professor/Gainesville

PUJADAS, GUILLERMO M., M.D., (Havana University)
Clinical Instructor/JHEP Jacksonville

RIDDICK, MAX F., M.D., (University of Tennessee)
Clinical Instructor/Winter Park

SHAW, CHARLES H., M.D., (Wayne State University)
Clinical Instructor/Gainesville

SLATTERY, JAMES B., M.D., (University of Florida)
Clinical Instructor/Gainesville

SPIVEY, JAMES N., M.D., (Med. Col. of South Carolina)
Clinical Instructor/Winter Park

STANFORD, THOMAS A., M.D., (Loma Linda University)
Clinical Instructor/Winter Park

SWITZER, HUGH E., M.D., (University of Miami)
Clinical Instructor/JHEP/Jacksonville

THOMPSON, JOHN Q., M.D., (Harvard Medical School)
Clinical Assistant Professor/JHEP/Jacksonville

TODD, ETHAN O., JR., M.D., (Med. Col. of South Carolina)
Clinical Assistant Professor/JHEP/Jacksonville

VAUGHEN, JUSTINE L., M.D., (Temple University)
Clinical Assistant Professor/Gainesville

WALLACE, PAUL F., M.D., (University of Chicago)
Clinical Assistant Professor/St. Petersburg

WILLIAMS, JOHN W., JR., M.D., (University of Miami)
Clinical Instructor/JHEP/Jacksonville

PATHOLOGY

* BAER, HERMAN, M.D., (University of Basel, Switzerland)
Associate Professor and Director of Autopsy

BALLINGER, WILLIAM E., M.D., (University of Florida)
Associate Professor and Chief of Neuropathology

* BRAYLAN, RAUL C., M.D., (Buenos Aires Medical School)
Professor

* CRANDALL, CATHERINE A., Ph.D., (Purdue University)
Associate Professor

* CROKER, BYRON P., M.D., Ph.D., (Duke University)
Associate Professor

* DONNELLY, WILLIAM H., M.D., (University of Ottawa)
Associate Professor and
Associate Professor of Pediatrics

FRANZINI, DAISY A., M.D.,
(Faculdade Medicina Jundiai, San Paulo, Brazil)
Assistant Professor

* GRAMS, RALPH R., M.D., (University of Minnesota)
Professor and Director of Medical Systems

* HACKETT, RAYMOND L, M.D., (University of Vermont)
Professor and Associate Chairman

HARDY, NED M., M.D., (University of Florida)
Assistant Professor/JHEP

HOOD, C. IAN, M.B., Ch.B., (University of Liverpool)
Professor and Chief of Laboratory Services/VAMC

HUNTER, STEPHEN B., M.D., (Emory University)
Assistant Professor

KEITT, ALAN S., M.D., (Harvard Medical School)
Associate Professor

KIMURA, ARTHUR K., Ph.D., (U.C.L.A.)
Assistant Professor

* KLEIN, PAUL A., Ph.D., (University of Florida)
Associate Professor

KITCHENS, CRAIG, M.D., (University of Florida)
Assistant Professor and Assistant Professor of Medicine

* MACLAREN, NOEL K., M.B., Ch.B., (University of Otago)
Professor and Director of Chemistry

MEDINA, JAMES, M.D., (University of Buenos Aires)
Assistant Professor/JHEP

* MOSCOVICI, CARLO, Ph.D., (University of Rome)
Professor

* NORMANN, SIGURD J., M.D., Ph.D., (Univ. of Washington)
Professor and Chief of Cardiac Pathology

* PECK, AMMON B., Ph.D., (University of Wisconsin)
Assistant Professor

PIERSON, K. KENDALL, M.D., (New York University)
Professor and Head of Surgical Pathology

RHATIGAN, RONALD M., M.D., (University of Iowa)
Professor and Associate Chairman for Jacksonville Programs

RILEY, WILLIAM J., M.D . (University of Kentucky)
Assistant Professor

SAFFOS, ROSILIE O., M.D., (University of Florida)
Associate Professor/JHEP

* SCORNIK, JUAN C., M.D., (Univ. of La Plata, Argentina)
Associate Professor and Head of Immunogenetics

SMITH, ALBERT C., M.D., Ph.D., (Univ. of Hawaii)
Assistant Professor

* SMITH, RICHARD T., M.D., (Tulane University)
Professor and Chairman and
Professor in Pediatrics

* TEAGUE, PERRY O., Ph.D., (University of Oklahoma)
Associate Professor

WAKELAND, EDWARD K., Ph.D., (University of Hawaii)
Assistant Professor

WILKINSON, EDWARD J., M.D., (Marquette University)
Professor

* WOODARD, JAMES C., D.V.M., Ph.D., (M.I.T.)
Associate Professor and
Associate Professor in College of Veterinary Medicine

Volunteer Faculty

BERNHARDT, HARVEY E., M.D., (Univ. of Louisville)
Clinical Associate Professor/JHEP/Jacksonville

BYER, GEORGE E., M.D., (Temple University)
Clinical Associate Professor/Gainesville

LIPKOVIC, PETER, M.D., (Univ. Of Beograd, Yugoslavia)
Clinical Associate Professor/JHEP/Jacksonville

MULLEN, SANFORD, A., M.D., (Columbia University)
Clinical Professor/JHEP/Jacksonville

RYDEN, SALLY E., M.D., (Univ. of Michigan)
Clinical Assistant Professor/Gainesville

PEDIATRICS

General Pediatrics

DEBUSK, FRANKLIN L., M.D., (Johns Hopkins)
Professor and Chief

ENGELHARDT, ELIZABETH, M.D., (Washington University)
Assistant Professor

GOUDARZI, TAJVAR, M.D., (Tehran Medical School)
Assistant Professor/JHEP

NACKASHI, JOHN A., M.D., (University of Florida)
Assistant Professor

PARKHURST, ROBERT, M.D., (Univ. of Michigan)
Assistant Professor

PESEK, JOSEPH A., M.D., (University of Miami)
Assistant Professor/JHEP

SOLER, GLADYS P., M.D., (University of Havana)
Assistant Professor/JHEP

STEINBERG, MARC P., M.D., (University of South Florida)
Assistant Professor

WAGNER, MARY V., M.D., (University of Florida)
Assistant Professor

WEBER, F. THOMAS, M.D., (University of Cincinnati)
Associate Professor

WHITWORTH, JAY M., M.D., (Indiana University)
Associate Professor

Cardiology

BAYNE, EDWARD J., M.D., (Medical College of Virginia)
Assistant Professor/JHEP

EPSTEIN, MICHAEL, M.D., (Univ. of Texas-Galveston)
Associate Professor

GESSNER, IRA H., M.D., (University of Vermont)
Professor and Chief

McCRORY, JAMES, M.D., (Tulane Univ.)
Assistant Professor/JHEP

MILLER, ROBERT, M.D., (University of Florida)
Associate Professor/JHEP

SCHIEBLER, GEROLD, L., M.D., Ph.D., (Harvard Univ.)
Professor and Chairman

VICTORICA, BENJAMIN E., M.D., (Univ. of Cuyo, Argentina)
Professor

Endocrinology

KAPPY, MICHAEL, M.D., Ph.D., (Univ. of Wisconsin)
Associate Professor
ROSENBLOOM, ARLAN L., M.D., (Univ. of Wisconsin)
Professor and Chief
SILVERSTEIN, JANET, M.D., (University of Pennsylvania)
Assistant Professor

Epidemiology and Biostatistics

KRISCHER, JEFFREY P., Ph.D., (Harvard University)
Associate Professor

Gastroenterology

ANDRES, JOEL M., M.D., (SUNY-Buffalo)
Associate Professor and Chief
GEORGE, DONALD E., M.D., (SUNY-Buffalo)
Assistant Professor

Genetics

FRIAS, JAIME L., M.D., (Univ. of Concepcion, Chile)
Professor and Chief
GARNICA, ADOLFO D., M.D., (Univ. of Calif.-San Francisco)
Associate Professor
KOHN, PETER, Ph.D., (Boston University)
Assistant Professor
McREYNOLDS, JOHN, M.D., (University of Oklahoma)
Assistant Professor
WHITE, ANDREA M., Ph.D., (University of Rhode Island)
Instructor
WILLIAMS, CHARLES A., M.D., (University of Florida)
Assistant Professor and
Medical Director, Sunland Training Center

Hematology

GARDNER, RENEE, M.D., (Harvard University)
Assistant Professor
GEE, ADRIAN P., Ph.D., (Univ. of Edinburgh, Scotland)
Visiting Assistant Professor
GRAHAM-POLE, JOHN, M.D., (St. Bartholomews Hosp., London)
Associate Professor
GROSS, SAMUEL, M.D., (University of Rochester)
Professor and Chief
MEHTA, PAULETTE S., M.D., (Univ. of Louvain)
Associate Professor

Immunology and Infectious Diseases

AYOUB, ELIA M., M.D., (American Univ. of Beirut)
Professor and Chief
BARRETT, DOUGLAS, M.D., (University of South Florida)
Assistant Professor
REUMAN, PETER, M.D., (University of Chicago)
Assistant Professor

Neonatology

BEHNKE, MARYLOU, M.D., (Univ. of Florida)
Assistant Professor
BUCCIARELLI, RICHARD, M.D., (Univ. of Michigan)
Associate Professor and Chief
CHIU, THOMAS T. W., M.D., (Univ. of Hong Kong)
Assistant Professor/JHEP
DRUMMOND, WILLA H., M.D., (Univ. of Pennsylvania)
Associate Professor
EITZMAN, DONALD V., M.D., (Univ. of Iowa)
Distinguished Service Professor
EYLER, FONDA, Ph.D., (University of Florida)
Assistant Professor
FREEDMAN, STEVE A., Ph.D., (Florida State Univ.)
Assistant Professor and Associate Chairman for Management
GARRISON, R. DONALD, M.D., (Univ. of North Carolina)
Assistant Professor/JHEP
HABERKERN, CHARLES M., M.D., (Columbia University)
Assistant Professor
HUTCHISON, ALASTAIR, M.B.Ch.B., (U. of Aberdeen, Scotland)
Assistant Professor
MALESIC, IRENE E., M.D., (Hahnemann Medical College)
Assistant Professor/JHEP
NEU, JOSEF, M.D., (Univ. of Wisconsin)
Associate Professor
RESNICK, MICHAEL B., Ed.D., (University of Florida)
Assistant Professor

Nephrology

FENNELL, ROBERT S., III, M.D., (Univ. of Florida)
Associate Professor/Director of Pediatric Dialysis Unit
GARIN, EDUARDO H., M.D., (University of Chile)
Associate Professor
IRAVANI, ABDOLLAH, M.D., (Tehran University)
Assistant Professor
LEVIN, SIDNEY, M.D., (Baylor University)
Professor and Associate Chairman for Jacksonville Programs
RICHARD, GEORGE A., M.D., (University of Pittsburgh)
Professor and Chief
TOLAYMAT, ASAD, M.D., (Damascas School of Medicine)
Associate Professor/JHEP

Neurology

BUDA, FRANCIS B., M.D., (Univ. of New Jersey)
Assistant Professor/JHEP

ROSS, JOHN J., M.D., (Harvard University)
Professor and Chief

Pediatric Research

KUTSCHE, LYNN, M.D., (University of Michigan)
Assistant Professor

VAN MIEROP, L.H.S., M.D., (St. Univ. of Leiden)
Graduate Research Professor and Chief

Pulmonary

CHESROWN, SARAH, M.D., (Med. College of Virginia)
Assistant Professor

HUTCHISON, ARLENE A., M.D.,
(University of Manitoba, Winnepeg, Canada)
Assistant Professor

LOUGHLIN, GERALD M., M.D., (University of Rochester)
Associate Professor and Chief

SHERMAN, JAMES M., M.D., (Univ. of South Florida)
Assistant Professor

Volunteer Faculty

ALEXANDER, GREGOR, M.D., (Juveriana University)
Clinical Assistant Professor/Longwood

ANDERSEN, TORSTEN, M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

AXLEY, JOHN, M.D., (University of Maryland)
Clinical Assistant Professor/PEP/Pensacola

BAKER, ROY M., M.D., (Emory University)
Clinical Professor/JHEP/Jacksonville

BANKS, JUDITH, M.D., (Univ. of Chicago)
Clinical Assistant Professor/Gainesville

BARTLETT, JOHN, M.D., (University of Florida)
Clinical Assistant Professor/Fort Myers

BEAM, LEWIS R., JR., M.D., (Vanderbilt University)
Clinical Associate Professor/Winter Park

BELL, WILLIAM R., M.D., (Duke University)
Clinical Professor/Director of
Pediatric Services/PEP/Pensacola

BENSON, ROBERT S., M.D., (Emory University)
Clinical Assistant Professor/PEP/Pensacola

BENTON, CHARLES R., M.D., (Columbia University)
Clinical Assistant Professor/PEP/Pensacola

BLOOM, FREDERICK L., M.D., (Med. Col. of Wisconsin)
Clinical Assistant Professor/Sarasota

BOOTHBY, RICHARD J., M.D., (SUNY-Downstate)
Clinical Associate Professor/JHEP/Jacksonville

BOWERS, JOHN A., M.D., (Med. Col. of Georgia)
Clinical Assistant Professor/JHEP/Jacksonville

BRILL, THOMAS M., M.D., (University of Michigan)
Clinical Professor/Gainesville

BULLARD, JOHN F., JR., M.D., (Univ. of Florida)
Clinical Assistant Professor/PEP/Pensacola

BUTSCHER, WILLIAM C., M.D., (Jefferson Med. Col.)
Clinical Professor/Ocala

CARITHERS, CORNELIA M., M.D., (Cornell University)
Clinical Assistant Professor/JHEP/Jacksonville

CARITHERS, HUGH A., M.D., (Emory University)
Clinical Professor/JHEP/Jacksonville

CHEDID, PHILIPPE, M.D., (French Faculty of Medicine)
Clinical Assistant Professor/JHEP/Jacksonville

CHIARO, JOSEPH, M.D., (University of Florida)
Clinical Assistant Professor/Orlando

CLEMENT, STEPHEN P., M.D., (Harvard Univ.)
Clinical Assistant Professor/Sarasota

CLUBBS, ROGER C., M.D., (University of Arkansas)
Clinical Assistant Professor/PEP/Pensacola

COHAN, ROBERT H., M.D., (Univ. of North Carolina)
Clinical Assistant Professor/PEP/Pensacola

COHEN, JERROLD H., M.D., (University of Tennessee)
Clinical Assistant Professor/PEP/Pensacola

COLYER, ROBERT F., JR., M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

CONDRON, COLIN J., M.D., (University of Dublin)
Clinical Associate Professor and
Department Chairman/Orlando

CRANE, JAMES D., M.D., (Duke University)
Clinical Assistant Professor/JHEP/Jacksonville

DAVID, JOSEPH K., M.D., (Duke University)
Clinical Professor/JHEP/Jacksonville

DEEB, LARRY, M.D., (Emory University)
Clinical Assistant Professor/Tallahassee

DELL, GEORGE A., M.D., (St. Louis University)
Clinical Professor/Gainesville

DELLINGER, CHARLES T., M.D., (Univ. of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

ESCHENBURG, CHARLES, M.D., (University of Colorado)
Clinical Assistant Professor/Delray Beach

FAKHREDDINE, FUAD A., M.D., (Univ. of Baghdad)
Clinical Instructor/JHEP/Jacksonville

FLEET, JOEL, M.D., (Tulane University)
Clinical Assistant Professor/JHEP/Jacksonville

FRAME, EUGENE M., M.D., (Temple University)
Clinical Associate Professor/JHEP/Jacksonville

FRASER, DONALD J., M.D., (Hahnemann Med. College)
Clinical Associate Professor/Orlando

GABERTAN, BONIFACIO, M.D., (Univ. of Santo Thomas)
Clinical Instructor/JHEP/Jacksonville

GILLIS, HARRY G., M.D., (University of Florida)
Clinical Assistant Professor/Daytona Beach

GINTER, MYRNA B., M.D., (University of Havana)
Clinical Associate Professor/JHEP/Jacksonville

GIUSTI, VINCENT F., M.D., (University of Pennsylvania)
Clinical Assistant Professor/Orlando

GRANAT, LLOYD E., M.D., (SUNY-Downstate)
Clinical Assistant Professor/JHEP/Jacksonville

GUEDES, BENJAMIN L., M.D., (University of Florida)
Clinical Assistant Professor/Orlando

GUTTERY, EDWIN III, M.D., (University of Louisville)
Clinical Assistant Professor/Fort Myers

GYLAND, STEPHEN P., M.D., (Vanderbilt University)
Clinical Assistant Professor/JHEP/Jacksonville

HABIB, AMID, M.D., (Damascus University)
Clinical Instructor/Orlando

HADLEY, WILLIAM P., M.D., (Duke University)
Clinical Professor/Gainesville

HANSBERRY, WILLIAM E., M.D., (University of Miami)
Clinical Associate Professor/JHEP/Jacksonville

HELLRUNG, JOHN M., M.D., (Univ. of South Florida)
Clinical Assistant Professor/Gainesville

HOFFMAN, LLOYD E., M.D., (University of Florida)
Clinical Assistant Professor/Salt Lake City, Utah

HORN, KENNETH A., M.D., (N.Y. Univ. School of Med.)
Clinical Associate Professor/JHEP/Jacksonville

INGLE, ERON B., M.D., (Tulane Medical School)
Clinical Assistant Professor/Orlando

IVEY, JOHN F., M.D., (Baylor University)
Clinical Associate Professor/JHEP/Jacksonville

JENKINS, THOMAS G., M.D., (University of Nebraska)
Clinical Assistant Professor/PEP/Pensacola

JONES, JIMMY E., M.D., (University of Tennessee)
Clinical Assistant Professor/PEP/Pensacola

JONGCO, ETHELINDA R., M.D., (Univ. of Philippines)
Clinical Assistant Professor/Kissimmee

JONGKO, GERMELINA R., M.D., (Univ. of Santo Tomas)
Clinical Assistant Professor/PEP/Pensacola

KANAREK, KEITH S., M.D., (Univ. of Witwatersrand)
Clinical Assistant Professor/Tampa

KELLY, WALTER C., M.D., (Temple University)
Clinical Associate Professor/JHEP/Jacksonville

KING, ALTON E., M.D., (University of Miami)
Clinical Instructor/JHEP/Jacksonville

KOHLER, WILLIAM C., M.D., (University of Florida)
Clinical Assistant Professor/Tallahassee

KOKOMOOR, MARVIN L., M.D., (University of Michigan)
Clinical Associate Professor/Gainesville

LANE, JOHN G., JR., M.D., (George Washington Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

LANIER, JAMES C., M.D., (Vanderbilt University)
Clinical Associate Profesor/JHEP/Jacksonville

LASPADA, ANTHONY, M.D., (University of Bologna)
Clinical Assistant Professor/JHEP/Jacksonville

LAZOFF, STEPHEN, M.D., (Boston Univ. Sch. of Med.)
Clinical Associate Professor/JHEP/Jacksonville

LIPMAN, BRIAN, M.D., (Univ. of the Witwatersrand)
Clinical Instructor/Orlando

MANTILLA, GONZALO, M.D., (University of Florida)
Clinical Assistant Professor/Quito, Equador

MARRIOT, HENRY J., M.D., (Oxford University)
Clinical Professor/St. Petersburg

McGUIRE, CHARLOTTE, M.D., (University of Arkansas)
Clinical Professor/Tallahassee

McINTOSH, CHARLES B., M.D., (Meharry Medical Col.)
Clinical Associate Professor/JHEP/Jacksonville

McWILLIAMS, NEIL E., M.D., (University of Florida)
Clinical Assistant Professor/PEP/Pensacola

MIGNEREY, THOMAS G., M.D., (Ohio State University)
Clinical Assistant Professor/PEP/Pensacola

MOORE, MARCUS M., M.D., (Duke University)
Clinical Associate Professor/Fort Myers

MORGAN, WILLIAM C., M.D., (University of Florida)
Clinical Assistant Professor/Sarasota

MORONEY, JOHN D., M.D., (St. Louis University)
Clinical Assistant Professor/Tampa

MOSS, JAMES K., M.D., (Med. Col. of Georgia)
Clinical Associate Professor/JHEP/Jacksonville

O'DANIEL, JOSEPH R., M.D., (University of Kentucky)
Clinical Instructor/PEP/Pensacola

PASHAYAN, MARK, M.D., (Bowman Gray)
Clinical Assistant Professor/Gainesville

PATTANI, JAYKUMAR, M.D., (Bombay University)
Clinical Instructor/JHEP/Jacksonville

PERLMAN, M. ALLAN, M.D., (University of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

PICARDI, MERCEDES E., M.D., (University of Puerto Rico)
Clinical Assistant Professor/PEP/Pensacola

PICKENS, JAMES C., M.D., (University of Alabama)
Clinical Assistant Professor/PEP/Pensacola

POLLACK, MICHAEL, M.D., (Albert Einstein)
Clinical Assistant Professor/Orlando

POTTER, NELL W., M.D., (University of Florida)
Clinical Assistant Professor/PEP/Pensacola

POWERS, DAVID W., M.D., (University of Florida)
Clinical Assistant Professor/Inverness

PRICE, MORRIS A., M.D., (Emory University)
Clinical Associate Professor/JHEP/Jacksonville

RAGLAND, ROBERT B., M.D., (Duke University)
Clinical Assistant Professor/JHEP/Jacksonville

RAPTOULIS, ARTHUR, M.D., (SUNY-Brooklyn)
Clinical Associate Professor/Orlando

REDD, HENRY J., M.D., (Johns Hopkins University)
Clinical Assistant Professor/Lakeland

RITROSKY, JOHN, JR., M.D., (SUNY-Syracuse)
Clinical Associate Professor/Fort Myers

ROSENBERG, STEVEN, M.D., (SUNY-Brooklyn)
Clinical Assistant Professor/Orlando

ROSENBLATT, CHERYL C., M.D., (SUNY-Buffalo)
Clinical Assistant Professor/JHEP/Jacksonville

ROWLEY, SAMUEL D., M.D., (Jefferson Med. Col.)
Clinical Assistant Professor/JHEP/Jacksonville

RUSHTON, F. EDWARDS, M.D., (University of Virginia)
Clinical Assistant Professor/Sarasota

SABATER, ALBERTO, M.D., (Univ. of Philippines)
Clinical Instructor/JHEP/Jacksonville

SANDERS, SANDY K., M.D., (University of Florida)
Clinical Associate Professor/Gainesville

SCHAFER, WALTER L., M.D., (Ohio State University)
Clinical Assistant Professor/St. Petersburg

SHASHY, ROBERT A., M.D., (Med. Col. of South Carolina)
Clinical Associate Professor/JHEP/Jacksonville

SIGNER, RICHARD, M.D., (Chicago Medical School)
Clinical Assistant Professor/Orlando

SKINNER, RICHARD G., JR., M.D., (Emory University)
Clinical Professor/JHEP/Jacksonville

SMALLWOOD, DON, M.D., (Indiana Medical School)
Clinical Assistant Professor/Delray Beach

SMITH, EDWARD W. P., M.D., (Ohio State Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

SOUD, GARY G., M.D., (Univ. of Barcelona)
Clinical Assistant Professor/JHEP/Jacksonville

THRELKEL, ROBERT, M.D., (Duke University)
Clinical Associate Professor/JHEP/Jacksonville

TOKARSKI, PENELOPE, M.D., (Loyola University)
Clinical Instructor/Orlando

TOWNSEND, JAMES W., M.D., (Duke University)
Clinical Professor/JHEP/Jacksonville

VINSON, ROBERT H., M.D., (Univ. of North Carolina)
Clinical Professor/Vero Beach

WALKER, JAMES W., M.D., (University of Tennessee)
Clinical Assistant Professor/JHEP/Jacksonville

WEISE, EDMUND R., M.D., (University of Virginia)
Clinical Instructor/JHEP/Jacksonville

WELTY, PAUL B., M.D., (Tulane University)
Clinical Assistant Professor/St. Petersburg

WESTMARK, EDWARD, M.D., (University of Florida)
Clinical Professor/PEP/Pensacola

WHITCOMB, JOHN H., M.D., (Harvard Medical School)
Clinical Professor/PEP/Pensacola

WHITNEY, RICHARD H., JR., M.D., (University of Alabama)
Clinical Assistant Professor/PEP/Pensacola

WILEY, HENRY E., III, M.D., (Univ. of Florida)
Clinical Assistant Professor/Tampa

WILSON, ROBERT K., M.D., (University of Alabama)
Clinical Assistant Professor/PEP/Pensacola

WOLFSON, SORRELL, L., M.D., (Vanderbilt University)
Clinical Professor/Tampa

WOODWARD, PAT, M.D., (Emory University)
Clinical Assistant Professor/Quincy

WORRELL, CYNTHIA, M.D., (University of Arkansas)
Clinical Assistant Professor/PEP/Pensacola

WUBBENA, PAUL F., JR., M.D., (Emory University)
Clinical Associate Professor/JHEP/Jacksonville

ZAVELSON, THOMAS M., M.D., (Duke University)
Clinical Associate Professor/Gainesville

ZIMMERMAN, DALE, M.D., (University of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

PHARMACOLOGY AND THERAPEUTICS

BAKER, STEPHEN P., Ph.D., (University of Aston)
Assistant Professor

BAR-ILAN, AMIR, Ph.D., (Hebrew University, Jerusalem)
Assistant Research Scientist

* CHILDERS, STEVEN R., Ph.D., (University of Wisconsin)
Assistant Professor

* CREWS, FULTON T., Ph.D., (University of Michigan)
Assistant Professor

* GARG, LAL C., Ph.D., (University of Florida)
Associate Professor

* KEM, WILLIAM R., Ph.D., (University of Illinois)
Associate Professor

* LEIBMAN, KENNETH C., Ph.D., (New York University)
Professor

* MAREN, THOMAS H., M.D., (Johns Hopkins University)
Graduate Research Professor

* MEYER, EDWIN M., Ph.D., (Massachusetts Inst. of Technology)
Assistant Professor

* MUTHER, THOMAS F., Ph.D., (Leeds University)
Associate Professor

* NEIMS, ALLEN H., M.D., Ph.D., (Johns Hopkins Univ.)
Professor and Chairman and Professor of Pediatrics

* ROSS, WARREN E., M.D., (University of Florida)
Associate Professor and Associate Professor of Medicine

* SHIVERICK, KATHLEEN T., Ph.D., (Univ. of Vermont)
Associate Professor

* SHAFERMAN, DAVID N., Ph.D., (Columbia University)
Professor and Professor of Biochemistry and Molecular Biology
* TU, CHINGKUANG, Ph.D., (University of Miami)
Assistant Research Scientist
* VOGH, BETTY P., Ph.D., (University of Florida)
Associate Research Scientist
YALOWICH, JACK C., Ph.D., (SUNY-Buffalo)
Assistant Research Scientist

PHYSIOLOGY

* ANDERSON, PETER A., Ph.D., (St. Andrews Univ., Scotland)
Assistant Professor
* CASSIN, SIDNEY, Ph.D., (Univ. of Texas-Galveston)
Professor
* FREGLY, MELVIN J., Ph.D., (University of Rochester)
Graduate Research Professor
* GERENCSER, GEORGE A., Ph.D., (Indiana University)
Associate Professor
* JAEGER, MARC J., M.D., (Univ. of Berne, Switzerland)
Professor
* OTIS, ARTHUR B., Ph.D., (Brown University)
Professor
* PHILLIPS, M. IAN, Ph.D., (Univ. of Birmingham, England)
Professor and Chairman
* POSNER, PHILIP, Ph.D., (SUNY-Downstate)
Associate Professor
* RAIZADA, MOHAN K., Ph.D., (Univ. of Kanpur, India)
Associate Professor
* STAINSBY, WENDELL N., Sc.D., (Johns Hopkins Univ.)
Professor
* STEVENS, BRUCE R., Ph.D., (Univ. of California-Los Angeles)
Assistant Professor
* SUMNERS, COLIN, Ph.D., (Univ. of Southampton, England)
Assistant Professor
* WOOD, CHARLES A., Ph.D., (U. of California-San Francisco)
Assistant Professor

PSYCHIATRY

* ADAMS, JOHN E., M.D., (Cornell)
Professor and Chairman and Professor of Clinical Psychology
AHSANUDDIN, KHAJA M., M.D., (Osmania University)
Associate Professor and Chief, Child Consultation-Liaison Service, and Associate Professor of Pediatrics
AREY, SANDRA S., Ph.D., (University of Florida)
Assistant Research Scientist
AUTH, JOANNE B., M.H.Ed., (University of Florida)
Associate in Psychiatry
BARNARD, GEORGE W., M.D., (Univ. of North Carolina)
Professor and Chief, Consultation-Liaison Service
BELAR, CYNTHIA D., Ph.D., (Ohio University)
Associate Professor of Clinical Psychology in Psychiatry and Associate Professor of Clinical Psychology
* BLASHFIELD, ROGER K., Ph.D., (Indiana University)
Associate Professor of Clinical Psychology in Psychiatry and Associate Professor of Clinical Psychology
COLLINS, DOROTHY E., M.S.W., (University of Chicago)
Associate Professor of Social Work in Psychiatry
DIRECTOR, KENNETH L., M.D., (Albany Med. College)
Associate Professor
EDNIE, KATHRYN J., M.D., (Michigan State)
Assistant Professor/VAMC
GOBLE, LARRY K., M.S.W., (Ohio State University)
Assistant Professor of Social Work in Psychiatry
GORDON, RICHARD E., M.D., Ph.D., (Univ. of Michigan)
Associate Professor
GREENBERG, SAMUEL I., M.D., (University of Chicago)
Visiting Associate Professor/VAMC
HARRIS, FAYE G., Ed.D., (University of Florida)
Professor of Psychiatric Nursing in Psychiatry and Professor of Nursing
HODGIN, JON D., M.D., (University of North Carolina)
Assistant Professor and Assistant Professor of Psychiatry in Family Practice and Community Health
* JOHNSON, SUZANNE B., Ph.D., (SUNY-Stony Brook)
Associate Professor of Clinical Psychology in Psychiatry, Associate Professor of Clinical Psychology, and Associate Professor of Pediatrics
KANTER, GARY L., M.D., (University of Rochester)
Assistant Professor/VAMC
* KULDAU, JOHN M., M.D., (Case Western Reserve)
Professor and Associate Chairman; Chief, Social and Community Psychiatry; Director, Residency Training Program
MASKIN, MEYER H., M.D., (Wayne State University)
Professor Emeritus/VAMC
MAURER, RALPH G., M.D., (Yale University)
Associate Professor and Chief, Child Inpatient Service
McDONALD, NANCY F., M.S.W., (University of N.C.)
Associate Professor of Social Work in Psychiatry
MILLER, ERNEST C., M.D., (Tulane University)
Clinical Instructor/JHEP
MILNER, GILBERT C., III, M.D., (Univ. of Texas-Southwestern)
Associate Professor and Chief, Child Outpatient Service
MOSKOVITZ, RICHARD A., M.D., (Harvard)
Associate Professor and Chief, Adult and Adolescent Inpatient Services
MUNIZ, CARLOS E., M.D., (Havana Univ. Med. Center)
Professor and Chief, Psychiatry Service VAMC; Professor of Pharmacy

NEWMAN, E. GUSTAVE, M.D., (Duke Univ. Med. Ctr.)
Associate Professor

OLDFIELD-HALL, ELIZABETH A., M.Ed., (Univ. of Fla.)
Assistant in Psychiatry

PERRY, NATHAN W., Ph.D., (Florida State University)
Professor of Clinical Psychology in Psychiatry and
Professor and Chairman of Clinical Psychology

* PLUTZKY, MAX, M.D., (Havana Univ. Medical Sch.)
Professor of Psychiatry and
Chief, Adult Psychiatry Outpatient Clinic;
Director of Undergraduate Training, and Professor of
Clinical Psychology

RADELET, MICHAEL L., Ph.D., (Purdue University)
Assistant Professor of Sociology in Psychiatry and
Assistant Professor of Sociology

RAND, COLLEEN S. W., Ph.D., (Stanford University)
Assistant Professor of Psychology in Psychiatry

RESNICK, MICHAEL B., Ed.D., (University of Florida)
Assistant Professor of Educational Psychology in
Psychiatry and Assistant Professor of Pediatrics

ROBBINS, MARILYN J., B.S., (Iowa State University)
Associate in Psychiatry

ROSARIO, AUREA, M.D., (Universidad del Este, Dom. Rep.)
Assistant Professor/VAMC

RUFFIN, WILLIAM C., JR., M.D., (Univ. of N.C.)
Professor of Psychiatry and Chief of Staff, Shands Hospital

STEWART, JONATHAN T., M.D., (University of South Florida)
Assistant Professor/VAMC

STEWART, RONALD B., M.S., (University of Florida)
Professor of Pharmacy in Psychiatry and Professor and
Chairman of Pharmacy Practice

SULLWOLD, ARTHUR F., M.D., (Louisiana State Univ.)
Assistant Professor/VAMC

* TUCKER, JALIE A., Ph.D., (Vanderbilt University)
Assistant Professor of Clinical Psychology in Psychiatry and
Assistant Professor of Clinical Psychology

VERA, MARIA I., M.S.W., (University of Kansas)
Assistant Professor of Social Work in Psychiatry

VERGARA, ALEJANDRO, M.D., (University of Havana)
Clinical Assistant Professor/JHEP

* VUCHINICH, RUDY E., Ph.D., (Vanderbilt University)
Assistant Professor of Clinical Psychology in Psychiatry and
Assistant Professor of Clinical Psychology

* WARHEIT, GEORGE J., Ph.D., (Ohio State University)
Professor of Sociology in Psychiatry and
Professor of Sociology

Volunteer Faculty

ANO, NELITA R., M.D., (University of Florida)
Clinical Instructor/South Daytona

ARANETA, ENRIQUE, M.D., (University of Philippines)
Clinical Associate Professor/Jacksonville

ASHAMALLA, MEDHAT G., M.D., (Univ. of Alexandria, Egypt)
Clinical Assistant Professor/US Military Service

BUCHHOLZ, ROBERT A., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

CASSISI, ELAYNE E., M.D., (University of Miami)
Clinical Instructor/Gainesville

DEAN, STANLEY R., M.D., (University of Michigan)
Clinical Professor/Miami

DUNHAM, GARY R., J.D., (University of Florida)
Adjunct Assistant Professor/Gainesville

EMERSON, RICHARD P., M.D., (Harvard University)
Clinical Assistant Professor/Miami

GELFAND, FRANCINE L., M.D., (New Jersey Medical School)
Clinical Assistant Professor/Leesburg

GOSSINGER, GARY T., M.D., (University of Michigan)
Clinical Assistant Professor/Gainesville

HAMPTON, ARCHIBALD, M.D., (Emory University)
Clinical Assistant Professor/Alachua

HANKINS, GARY C., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

KESKINER, ALI, M.D., (McGill University)
Clinical Assistant Professor/Tarpon Springs

KING, E. HENRY, M.D.,
(Columbia College of Physicians and Surgeons)
Clinical Assistant Professor/Gainesville

KING, R. TAYLOR, M.D., (Vanderbilt University)
Clinical Assistant Professor/Jacksonville

KOLIN, IRVING S., M.D., (SUNY-Upstate)
Clinical Assistant Professor/Orlando

LANGEE, HARVEY R., M.D., (Stanford University)
Clinical Assistant Professor/Gainesville

LAZORITZ, MARTIN, M.D., (Medical College of Virginia)
Clinical Assistant Professor/Winter Park

LLINAS, JOSE J., M.D, (Havana Univ. Med. School)
Clinical Professor/Gainesville

McMAHON, ELIZABETH A., Ph.D., (University of Florida)
Clinical Assistant Professor/Gainesville

MEADOWS, RICHARD L., M.D., (University of Florida)
Clinical Assistant Professor/Clearwater

MHATRE, UMESH, M.B.B.S., (Univ. of Bombay, India)
Adjunct Assistant Professor/Lake City

MOST, BERTHA M., M.D., (University of Pittsburgh)
Adjunct Assistant Professor/Gainesville

NELSON, JOHN F., M.D., (University of Florida)
Clinical Instructor/Gainesville

POLLACK, ROBERT W., M.D., (SUNY-Downstate)
Clinical Assistant Professor/Winter Park

SALL, DAVID L., M.D., (Thomas Jefferson University)
Clinical Assistant Professor/Jacksonville

SCOTT, GWENDOLYN L., M.D., (University of Cincinnati)
Clinical Assistant Professor/Tarpon Springs

SPRINGER, PHILIP K., M.D., (University of Mississippi)
Clinical Assistant Professor/Gainesville

STEIN, JOEL M., M.D., (University of Florida)
Clinical Assistant Professor/Jacksonville

STIEFEL, JOHN R., M.D., (Emory University)
Clinical Assistant Professor/Gainesville

TABOADO, VIOLA Y., M.D., (Cebu Institute of Technology)
Clinical Instructor/Crystal River

VAUGHN, RUFUS M., M.D., (University of Alabama)
Clinical Associate Professor/Gainesville

WARSON, SAMUEL, M.D., (McGill University)
Clinical Professor/Sarasota

WELLBORN, WALTER H., JR., M.D., (Emory University)
Clinical Professor/Tarpon Springs

WILDER, J. LLOYD, M.D., (Loma Linda University)
Clinical Instructor/Orlando

RADIOLOGY

AGEE, O. FRANK, M.D., (L.S.U.-New Orleans)
Professor

* ANDREW, E. RAYMOND, Ph.D., (Cambridge, England)
Graduate Research Professor

BALSYS, RAYMOND, M.D., (University of Arkansas)
Professor

BRADSHAW, JAMES A., M.D., (Med. Col. of Virginia)
Assistant Professor of Radiology and Pediatrics/JHEP

CLORE, FORREST C., M.D., (University of Michigan)
Associate Professor/VAMC

COUCH, MARGARET W., Ph.D., (University of Florida)
Assistant Research Professor/VAMC

FITZGERALD, LAWRENCE T., Ph.D., (Univ. of Fla.)
Associate Professor

FITZSIMMONS, JEFFREY R., Ph.D., (Univ. of Fla.)
Assistant Professor

HAMLIN, DEREK J., M.D., (University of Cape Town)
Assistant Professor

HAWKINS, IRVIN F., M.D., (University of Maryland)
Professor

HUDSON, TERRY M., M.D., (Duke University)
Associate Professor

KAUDE, JURI V., M.D., (University of Kiel)
Professor

LOTZ, PRESTON R., M.D., (Hahnemann Medical College)
Assistant Professor/VAMC

MANCUSO, ANTHONY A., M.D., (University of Miami)
Associate Professor/VAMC

MARECI, THOMAS H., Ph.D., (Oxford, England)
Assistant Professor

MAUDERLI, WALTER, D.Sc., (Fed. Inst. of Technology)
Professor

MILLER, ROBERT L., M.D., (Hahnemann Medical College)
Assistant Professor/JHEP

NORTHROP, H. MARTIN, M.D., (University of Arkansas)
Assistant Professor and Acting Associate Chairman
for Jacksonville Programs

QUISLING, RONALD G., M.D., (University of Wisconsin)
Associate Professor

SCOTT, KATHERINE N., Ph.D., (University of Florida)
Associate Research Professor/VAMC

WEAVER, JAMES W., M.D., (Tulane University)
Assistant Professor

WILLIAMS, CLYDE M., M.D., Ph.D.,
(Baylor University; Oxford)
Professor and Chairman

WILLIAMS, JONATHAN L., M.D., (Jefferson Med. College)
Associate Professor

WOOD, JOHN L, M.D., (University of Florida)
Assistant Professor/VAMC

WOOD, MARY B., M.D., (University of Florida)
Assistant Professor

Volunteer Faculty

BIDGOOD, WILLIS D., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

DICKHAUS, ALFRED J., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

FOTOPOULOS, JOHN P., M.D., (Tufts Medical School)
Clinical Professor/JHEP Jacksonville

HAWKINS, W. THOMAS, M.D., (U. of Texas-Southwestern)
Clinical Assistant Professor/Gainesville

JOHNSON, JAMES A., M.D., (Emory School of Medicine)
Clinical Assistant Professor/Gainesville

KOVACS, JOSEPH, M.D., (Medical College of Alabama)
Clinical Assistant Professor/Gainesville

McNEELY, GWYN F., M.D., (Univ. of North Carolina)
Clinical Assistant Professor/Gainesville

POSTMA, TOM W., M.D., (University of Florida)
Clinical Assistant Professor/Gainesville

Radiation Therapy

* BOVA, FRANCIS J., Ph.D., (University of Florida)
Assistant Professor

KALBAUGH, KEVIN J., M.S., (University of Florida)
Assistant In Radiology

MARCUS, ROBERT B., JR., M.D., (Univ. of Florida)
Assistant Professor

MENDENHALL, WILLIAM M., M.D., (Univ. of South Florida)
Assistant Professor

* MILLION, RODNEY R., M.D., (Indiana University)
Professor and Chief

MITCHELL, THOMAS P., M.S., (Louisiana Poly. Univ.)
Assistant In Radiology

PARSONS, JAMES T., M.D., (Duke University)
Assistant Professor

SURGERY

Emergency Medicine

CROWE, DONALD W. (Indiana University School of Medicine)
Assistant Professor

GUILD, RALPH T., III, M.D., (University of Oklahoma)
Assistant Professor

MELKER, RICHARD J., M.D., Ph.D., (Albert Einstein)
Assistant Professor and
Assistant Professor of Anesthesiology and Pediatrics

ORBAN, DAVID J., M.D., (St. Louis University)
Associate Professor and Chief

Volunteer Faculty

DOAN, LYNETTE A., M.D., (Univ. of Cincinnati Sch. of Med.)
Adjunct Assistant Professor/JHEP/Jacksonville

HARWOOD, ANN L., M.D., (University of Iowa)
Assistant Professor and Director,
Emergency Services/JHEP/Jacksonville

HASSAN, MAJED B., M.D., (Faculty of Med. of Valencia, Spain)
Adjunct Instructor/JHEP/Jacksonville

LLERA, JORGE L., M.D., (Indiana University)
Adjunct Assistant Professor/JHEP/Jacksonville

LUTEN, ROBERT C., M.D., (University of Barcelona)
Adjunct Assistant Professor/JHEP/Jacksonville

MILLS, MYRON L., M.D., (Loma Linda University)
Adjunct Assistant Professor/JHEP/Jacksonville

SEGAR, DONNA L., M.D., (University of Cincinnati)
Adjunct Assistant Professor/JHEP/Jacksonville

SHATNEY, CLAYTON H., M.D., (Tufts University Sch. of Med.)
Adjunct Associate Professor/JHEP/Jacksonville

WEIMERSKIRCH, EILEEN M., M.D., (University of South Florida)
Clinical Assistant Professor/Fern Park

General Surgery

BLAND, KIRBY I., M.D., (University of Alabama)
Professor and Associate Chairman
Director, Residency Program

COPELAND, EDWARD M., III, M.D., (Cornell University)
Professor and Chairman

HOWARD, RICHARD J., M.D., (Yale University)
Professor

PFAFF, WILLIAM W., M.D., (Buffalo University)
Professor and Director, Transplantation Program

RUMLEY, THOMAS O., JR., M.D., (Univ. of North Carolina)
Assistant Professor/VAMC

SEEGER, JAMES M., M.D., (Medical College of Georgia)
Assistant Professor/VAMC

VOGEL, STEPHEN B., M.D., (University of Florida)
Associate Professor

WOODWARD, EDWARD R., M.D., (University of Chicago)
Professor

Volunteer Faculty

ALEXANDER, RAYMOND H., M.D., (Duke University)
Associate Professor and Associate Chairman/JHEP/Jacksonville

BEGGS, JOHN H., M.D., (University of Minnesota)
Clinical Assistant Professor/Lake City

BENSON, J. ROBERT, M.D., (Washington University)
Clinical Assistant Professor/JHEP/Jacksonville

BLACK, BRUCE A., M.D., (University of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

BOND, JAMES W., M.D., (Indiana University)
Clinical Associate Professor/JHEP/Jacksonville

BRIENT, BRUCE W., M.D., (University of Kansas)
Clinical Associate Professor/Gainesville

BROWN, J. BROOKS, M.D., (Tulane University)
Clinical Professor/JHEP/Jacksonville

CHACKO, JOHN H., M.D., (University of Kerala)
Clinical Assistant Professor/Lake City

COLLINS, CLYDE M., M.D., (Medical Col. of Georgia)
Clinical Associate Professor/JHEP/Jacksonville

DAY, SAMUEL M., M.D., (Washington University)
Clinical Assistant Professor/JHEP/Jacksonville

ESPINO, GONAZALO, A., M.D.,
(Ramon Ragasaysay Medical Center)
Clinical Instructor/JHEP/Jacksonville

FATEMI, AMIR H., M.D., (Pahlavi University)
Clinical Assistant Professor/JHEP/Jacksonville

FECHTEL, ALBERT T., M.D., (Tulane University)
Clinical Instructor/JHEP/Jacksonville

FERGUSON, EMMET F., M.D., (Medical Col. of Georgia)
Clinical Professor/JHEP/Jacksonville

FULMER, JACK T., M.D., (Case Western Reserve)
Clinical Assistant Professor/JHEP/Jacksonville

GARONI, WILLIAM J., M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

HAGAN, WAYNE V., M.D., (University of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

HARRISON, WILLIAM H., JR., M.D., (Emory University)
Clinical Assistant Professor Ormond Beach

HURLBUT, H. JOSEPH, M.D., (Emory University)
Clinical Assistant Professor JHEP Jacksonville

HUX, ROBERT H., M.D., (Medical Col. of Virginia)
Clinical Professor Leesburg

JENKINS, ORVIN, M.D., (University of Florida)
Clinical Associate Professor Gainesville

JOHNSON, HOUSTON, JR., M.D., (Harvard Medical School)
Adjunct Assistant Professor JHEP Jacksonville

MATHRU, MALI, M.D., (Jawaharlal Institute of Postgrad. Med.)
Clinical Associate Professor JHEP Jacksonville

MOSELEY, THAD M., M.D., (Vanderbilt)
Clinical Professor JHEP Jacksonville

PEARCE, HERBERT R., M.D., (University of Mississippi)
Clinical Assistant Professor JHEP Jacksonville

PHILLIPS, CURTIS M., M.D., (Medical College of Georgia)
Clinical Professor JHEP Jacksonville

PICKENS, N. EARLE, M.D., (University of Chicago)
Clinical Assistant Professor Gainesville

REINSTINE, HARRY W., JR., M.D., (Univ. of Virginia)
Clinical Professor JHEP Jacksonville

ROESCH, C. BURLING, M.D., (Cornell University)
Clinical Professor JHEP Jacksonville

SANTANA, ALBERTO, M.D., (Havana University)
Clinical Associate Professor JHEP Jacksonville

SMITH, LEWIS A., M.D., (University of Miami)
Clinical Assistant Professor JHEP Jacksonville

STEPHENSON, SAMUEL E., JR., M.D., (Vanderbilt)
Clinical Professor JHEP Jacksonville

STILL, ROBERT H., M.D., (Medical Col. of Georgia)
Clinical Associate Professor JHEP Jacksonville

STRANAHAN, ALLAN, M.D., (University of Tennessee)
Clinical Professor JHEP Jacksonville

STUBBS, GEORGE M., M.D., (Emory University)
Clinical Associate Professor JHEP Jacksonville

SWAMY, NANJUNDA, M.D., (University of Mysore)
Clinical Assistant Professor Lake City

THIGPEN, JACK B., JR., M.D., (University of Miami)
Clinical Assistant Professor JHEP Jacksonville

VENUS, BAHMAN, M.D., (Univ. of Jandi Shapur, Tehran, Iran)
Clinical Associate Professor Jacksonville

WEINSHELBAUM, EDWARD L., M.D., (Univ. of Chicago)
Clinical Associate Professor Gainesville

WHANG, JAI CHURL, M.D., (Seoul Nat'l. University)
Clinical Associate Professor JHEP Jacksonville

WHELCHEL, C. DAVIS, III, M.D., (Med. Col. of Georgia)
Clinical Associate Professor JHEP Jacksonville

YASREBI, HOSEIN, M.D., (University of Tehran)
Clinical Assistant Professor JHEP Jacksonville

Otolaryngology

BROWNELL, WILLIAM E., Ph.D., (Univ. of Chicago)
Associate Professor of Surgery and Neuroscience

CASSISI, NICHOLAS J., D.D.S., M.D., (Univ. of Miami)
Professor and Chief and
Professor of Oral Surgery and Dentistry

ISAACS, JOHN H., M.D., (University of Illinois)
Assistant Professor

MERWIN, GERALD A., M.D., (University of Minnesota)
Associate Professor

SINGLETON, GEORGE T., M.D., (Baylor University)
Professor and Chief VAMC

Volunteer Faculty

CASTELLI, JOHN B., JR., M.D., (Loyola University)
Clinical Assistant Professor Orange Park

FARRIOR, RICHARD T., M.D., (Duke University)
Clinical Professor Tampa

FLEIGEL, SUZANNE S., M.D., (Columbia Col. of Phys. and Surg.)
Clinical Assistant Professor Ocala

FOOTE, PERRY A., JR., M.D., (University of Florida)
Clinical Assistant Professor Gainesville

GARLINGTON, JAMES C., M.D., (Yale University)
Clinical Assistant Professor Gainesville

GOLDMAN, NELSON, M.D., (Medical College of Georgia)
Clinical Assistant Professor JHEP Jacksonville

ROOKS, JOHN J., JR., M.D., (University of Miami)
Clinical Assistant Professor Gainesville

SELTZER, H. MICHAEL, JR., M.D., (University of Florida)
Clinical Assistant Professor Daytona Beach

SMOLANSKY, STEPHEN J., M.D., (Washington University)
Clinical Assistant Professor JHEP Jacksonville

Pediatric Surgery

MILLER, DAVID, M.D., (Univ. of Louisville Sch. of Med.)
Assistant Professor

MOAZAM, FARHAT, M.D., (Dow Med. Col., Pakistan)
Associate Professor of Surgery and Pediatrics

TALBERT, JAMES L., M.D., (Vanderbilt)
Professor and Chief and Professor of Pediatrics

TEPAS, JOSEPH J., III, M.D., (Georgetown University)
Associate Professor

Volunteer Faculty

JONES, JIMMY E., M.D., (University of Tennessee)
Clinical Assistant Professor of Surgery
and Pediatrics Pensacola

WEBB, H. WARNER, M.D., (Emory University)
Clinical Associate Professor JHEP Jacksonville

WILKINSON, ALBERT H., JR., M.D., (Jefferson)
Clinical Professor/JHEP/Jacksonville

Plastic and Reconstructive Surgery

BINGHAM, HAL G., M.D., (University of Kansas)
Professor and Chief

CAFFEE, H. HOLLIS, M.D., (University of Florida)
Associate Professor and Chief/VAMC

SABATIER, RICHARD EDWARD, M.D., (Tulane Univ.)
Assistant Professor

Volunteer Faculty

ASOKAN, RANGASWAMY, M.D., (Madras Univ., India)
Clinical Assistant Professor/Ocala

BRILL, ROGER T., M.D., (University of Miami)
Clinical Assistant Professor/Gainesville

DUNCAN, ROBERT E., M.D., (Indiana University)
Clinical Associate Professor/JHEP/Jacksonville

FURLOW, LEONARD T., JR., M.D., (Washington Univ.)
Clinical Professor/Gainesville

HABAL, MUTAZ, M.D., (American University, Beirut)
Clinical Professor/Tampa

HOGUE, ROBERT J., JR., M.D., (University of Oklahoma)
Clinical Assistant Professor/Gainesville

KAMAL, ANWAR, M.D., (Chittagong Med. Col., Pakistan) *
Clinical Assistant Professor/JHEP/Jacksonville

KAPLAN, RAYMOND S., M.D., (University of Florida)
Clinical Associate Professor/JHEP/Jacksonville

KAYE, BERNARD L., D.M.D., M.D., (Harvard University)
Clinical Professor/JHEP/Jacksonville

LLEWELLYN, JACK S., D.M.D., (University of Alabama)
Clinical Assistant Professor/Gainesville

MORGAN, BERNARD L., M.D., (University of London)
Clinical Professor/JHEP/Jacksonville

PETERS, CALVIN R., M.D., (Louisiana State University)
Clinical Associate Professor/Winter Park

ROSENTHAL, SAMUEL G., M.D., (SUNY-Buffalo)
Clinical Assistant Professor/JHEP/Jacksonville

SCHEFFER, ROBERT B., D.D.S., (Georgetown University)
Associate Professor and Associate Chairman/JHEP/Jacksonville

SNYDER, GILBERT B., M.D., (Johns Hopkins)
Clinical Associate Professor/Miami

Thoracic and Cardiovascular Surgery

ALEXANDER, JAMES A., M.D., (Duke University)
Professor and Chief and Professor of Pediatrics

KNAUF, DANIEL G., M.D., (Northwestern University)
Associate Professor

ROBERTS, ARTHUR J., M.D., (Case Western Reserve)
Associate Professor

Volunteer Faculty

COUSAR, JAMES E., III, M.D., (Johns Hopkins)
Clinical Associate Professor/JHEP/Jacksonville

DAVIS, JAMES M., M.D., (Harvard University)
Clinical Assistant Professor/JHEP/Jacksonville

KOSTER, JOHN K., JR., M.D., (University of Kentucky)
Clinical Associate Professor/JHEP/Jacksonville

NUNN, DANIEL B., M.D., (University of South Carolina)
Clinical Assistant Professor/JHEP/Jacksonville

RAYL, JOHN E., M.D., (University of Louisville)
Clinical Associate Professor/Lake City

SANTIAGO, FERNANDO, M.D.,
(Jefferson Med. Col. of Philadelphia)
Clinical Assistant Professor/Lake City

SMITHWICK, WALTER, III, M.D., (Vanderbilt)
Clinical Assistant Professor/JHEP/Jacksonville

SNYDER, HAROLD E., M.D., (Vanderbilt)
Clinical Associate Professor/JHEP/Jacksonville

STRANAHAN, ALLAN, M.D., (University of Tennessee)
Professor/JHEP/Jacksonville

Urology

DRYLIE, DAVID M., M.D., (Bowman Gray)
Professor and Chief

FINLAYSON, BIRDWELL, M.D., Ph.D., (Univ. of Chicago)
Professor

WAJSMAN, ZEV, M.D., (Hadassah Medical School)
Associate Professor

WALKER, R. DIXON, III, M.D., (University of Miami)
Professor of Surgery and Pediatrics

Volunteer Faculty

ACKERMAN, EDWARD, M.D., (Wayne State University)
Clinical Associate Professor/Winter Park

ANTAR, MOHAMED H., M.D., (Damascus University)
Clinical Assistant Professor/JHEP/Jacksonville

BEARRS, ROLLIN W., M.D., (Wayne State Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

BURT, JAMES N., M.D., (University of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

CRUM, PAUL M., M.D., (University of Pennsylvania)
Clinical Assistant Professor/JHEP/Jacksonville

DALTON, DAVID L., M.D., (University of Tennessee)
Clinical Assistant Professor/JHEP/Jacksonville

DEARDOURFF, STEPHEN L., M.D., (Ohio State)
Clinical Associate Professor/Gainesville

DETURE, FRANCIS A., M.D., (University of Florida)
Clinical Assistant Professor/Winter Park

ECKELS, ALAN R., M.D., (University of Florida)
Clinical Assistant Professor/JHEP/Jacksonville

GONDER, FLOYD S., M.D., (Tulane University)
Clinical Assistant Professor JHEP Jacksonville

JABLONSKI, DONALD V., M.D., (Wayne State)
Clinical Associate Professor Winter Park

JILEK, JAROSLAV J., M.D., (Charles University, Czech.)
Clinical Instructor JHEP Jacksonville

KAELIN, JAMES E., M.D., (University of Louisville)
Clinical Assistant Professor JHEP Jacksonville

LEAL, JORGE J., M.D., (University of Florida)
Clinical Assistant Professor Cocoa

LEFFLER, NORMAN H., M.D., (Washington University)
Clinical Instructor JHEP Jacksonville

LEWIS, CHARLES W., JR., M.D., (Duke University)
Associate Professor and Chairman JHEP Jacksonville

McCULLY, ALVIE C., M.D., (University of Tennessee)
Clinical Associate Professor Tallahassee

PORTERFIELD, JAMES M., M.D., (Med. Col. of Virginia)
Clinical Assistant Professor Winter Park

ROLLINS, RALEIGH W., M.D., (Medical Col. of Georgia)
Clinical Assistant Professor Tallahassee

SAPOLSKY, JACK L., M.D., (University of Tennessee)
Clinical Assistant Professor JHEP Jacksonville

SMITH, H. LAWRENCE, M.D., (Jefferson Med. Col.)
Clinical Professor Tallahassee

STEVENS, PETER S., M.D., (Emory University)
Clinical Assistant Professor JHEP Jacksonville

STOKES, JOSEPH B., M.D., (Bowman Gray)
Clinical Associate Professor JHEP Jacksonville

TIMMONS, JOHN W., M.D., (Ohio State University)
Clinical Assistant Professor Gainesville

WEBSTER, ROBERT N., M.D., (Washington University)
Clinical Professor Tallahassee

WHITTAKER, JOHN R., M.D., (University of Cincinnati)
Clinical Assistant Professor JHEP Jacksonville

MEDICAL STUDENTS

Class of 1984

Name/Hometown/Residency

ADKINS, RICHARD KERMIT/Pensacola, FL
University Hospital, Jacksonville FL

ANDERSON, KAREN ELIZABETH/Fayetteville, NC
University Hospital, Jacksonville, FL

ATWELL, BERNARD LEE/Pensacola, FL
University of South Alabama Hospital, Mobile, AL

BATSON, CHARLES LEE/Blountstown, FL
Halifax Hospital, Daytona Beach, FL

BATTS, JOHN EDWARD/Shreveport, LA
Tulane University Hospital, New Orleans, LA

BEERS, THOMAS RAYMOND/Orlando, FL
Shands Hospital, Gainesville, FL

BLACK, HARRY HUNTLEY/Daytona Beach, FL
Orlando Regional Hospital, Orlando, FL

BLICKENSTAFF, JAN LYNN/Ft. Wayne, IN
Halifax Hospital, Daytona Beach, FL

BLYN, RHONDA JOAN/Portland, OR
Mount Sinai Hospital, Miami, FL

BORREGO, ROBERT/Miami, FL
State University Kings County Hospital, New York, NY

BOYNTON, DOUGLAS LEE/Naples, FL
Tallahassee Memorial Regional Hospital, Tallahassee, FL

BOYNTON, KATHLEEN KARN/Naples, FL
University of South Florida Hospital, Tampa, FL

BRELAND, HENRY BAKER/Marianna, FL
Tulane University Hospital, New Orleans, LA

BROWN, JOHN MARK/Seminole, FL
North Carolina Memorial Hospital, Chapel Hill, NC

BROWN, ROBERT LEWIS, SR./Dixie, GA
University Hospital, Jacksonville, FL

BROYLES, FRANCES EILEEN/Gainesville, FL
Albany Medical Center, Albany, NY

BUNKE, ROSALIND AMANDA/Stockpost, Cheshire, ENG
Sabbatical

BURKE, THERESA KIERNAN/Miami, FL
Alachua General Hospital, Gainesville, FL

CIMINO, PATRICK THOMAS/Tampa, FL
Alachua General Hospital, Gainesville, FL

CLAYTON, SYLVIA ANN/Ft. Walton Beach, FL
Grady Memorial Hospital, Atlanta, GA

COOPER, DAVID LYNN/Sistersville, WV
Shands Hospital, Gainesville, FL

COOPER, ROBERT ALAN/Orlando, FL
Shands Hospital, Gainesville, FL

CORRAO, PHILLIP JOSEPH/Surfside, FL
Southside Hospital, Bay Shore, NY

DAVENPORT, CHARLES JOHN/Bradenton, FL
Lenox Hill Hospital, New York, NY

DEIBERT, RICHARD IRVIN/Fernandina Beach, FL
Grady Memorial Hospital, Atlanta, GA

DENT, JAMES GREGORY/Jacksonville, FL
Illinois State Psychiatric Institute, Chicago, IL

DOLAN, JAMES BAILEY/Tampa, FL
Shands Hospital, Gainesville, FL

DRUM, JERRY BROWN/Jacksonville, FL
University Hospital, Jacksonville, FL

DUNCAN, DAVID ALLEN/Ocala, FL
University Hospital, Jacksonville, FL

EDDLETON, CYNTHIA LEE/Ormond Beach, FL
Shands Hospital, Gainesville, FL

EHRENFELD, HOWARD DONALD/Valley Stream, NY
Greenville Hositals, Greenville, SC

FEATHERMAN, DONALD SCOTT/Aspen, CO
Shands Hospital, Gainesville, FL

FISCHER, JEFFREY BRAD/Coral Springs, FL
Washington Hospital Center, Washington, DC

FOLEY, CONRAD BRUCE/Valparaiso, FL
Eastern Virginia Graduate Medical School, Norfolk, VA

FONSECA, ALLEN STEVE/St. Thomas, VI
Wright State University Hospital, Dayton, OH

FOUNTAIN, JONATHAN EDWIN/Crestview, FL
Duke University Medical Center, Durham, NC

GARNER, ERIC TALBERT/Jacksonville, FL
University of San Antonio Hospital, San Antonio, TX

GELLENS, MARY ELIZABETH/Plantation, FL
Jewish Hospital, St. Louis, MO

GIBSON, CALVIN LEON/Carol City, FL
Tuscaloosa Family Practice, AL

GOETHE, ROBERT CARL/Titusville, FL
University of Alabama Medical Center, Birmingham, AL

GREEN, JAMES JEFFREY/Greenville, SC
University Hospital, Jacksonville, FL

GRIFFETH, JAMES KENNETH, JR./Dunwoody, GA
Shands Hospital, Gainesville, FL

GRIFFIS, KATHLEEN MUELLER/Pensacola, FL
University Hospital, Jacksonville, FL

HAAS, ALI EKREM/Demarest, NJ
North Carolina Memorial Hospital, Chapel Hill, NC

HAFT, BRIAN IRA/Jacksonville, FL
University of South Florida Hospital, Tampa, FL

HARRIS, BRENDA FAGAN/Dade City, FL
Sabbatical

HARTSFIELD, RONALD CLINTON/Tallahassee, FL
University of Alabama Medical Center, Birmingham, AL

HENNEMANN, JEANNE MARIE/Hudson, OH
Mount Sinai Hospital, Miami, FL

HEUSER, MARK DAVID/Pompano Beach, FL
University Hospital, Jacksonville, FL

HEYSEK, RANDY VICTOR/Palm Harbor, FL
Baptist Memorial Hospital, Memphis, TN

HINES, KENNETH KAY/Winter Park, FL
Erie County Medical Center, Buffalo, NY

HOWARD, CATHERINE/Miami Shores, FL
Medical College of Virginia Hospital, Richmond, VA

INGRAM, KEITH EDWARD/Pompano Beach, FL
Tulane University Hospital, New Orleans, LA

JACKSON, DAVID BROWARD/Tallahassee, FL
Florida Hospital, Orlando, FL

JOHNS, CHRISTOPHER MORRIS/Vero Beach, FL
University Health Center of Pittsburgh, Pittsburgh, PA

JOHNSON, GENNETT/Orlando, FL
University Hospital, Jacksonville, FL

JOHNSON, JESSE WAYNE, JR./Oviedo, FL
Memorial Medical Center, Savannah, GA

JOHNSON, VERNON NATHANIEL/Cambridge, MD
Marshall University Hospital, Huntington, WV

JUBRAN, AMAL K./Jacksonville, FL
Texas Medical Branch, Galveston, TX

KEITH, WILLIAM RICHARD, JR./Springfield, IL
University of Alabama Hospital, Birmingham, AL

KLIMBERG, VICKI SUZANNE/Altoona, KA
Shands Hospital, Gainesville, FL

KRAFT, DIANA MARIE/Sterling, IL
North Carolina Memorial Hospital, Chapel Hill, NC

KUCHERA, JAY/North Palm Beach, FL
University of Miami Hospital, Miami, FL

KUPFER, STUART ROY/Jacksonville, FL
Yale-New Haven Medical Center, New Haven, CT

LaHATTE, LAWRENCE JAMES/Satellite Beach, FL
University of San Antonio Hospital, San Antonio, TX

LANGLEY, KENNETH EUGENE, JR./Tallahassee, FL
University Hospital, Jacksonville, FL

LAUDA, CARMEN MARIA/Hialeah, FL
Tallahassee Memorial Regional Hospital, Tallahassee, FL

LEVENSON, JEFFREY HERSCHEL/Spring Valley, NY
Georgia Baptist Hospital, Atlanta, GA

LEWIS, MARJORIE/Randolph, NJ
Baystate Medical Center, Springfield, MA

LEWITT, MELANIE SUE/Atlantic Beach, FL
Shands Hospital, Gainesville, FL

LOGSDON, VALERIE KAY W./Carrollton, OH
University of Utah Hospital, Salt Lake City, UT

LOVE, DAVID WILLIAM/Tallahassee, FL
Mountain Area Health Center, Ashville, NC

McCOOK, BARRY MOORE/Jacksonville, FL
Vanderbilt University Hospital, Nashville, TN

McCRANEY, DAVID PATRICK/Bartow, FL
Shands Hospital, Gainesville, FL

McCURDY, CHARLES MILTON, JR./St. Petersburg, FL
Naval Regional Medical Center, Portsmouth, VA

MAGUIRE, MAUREEN ALANNA/Pensacola, FL
Shands Hospital, Gainesville, FL

MALASANOS, TOREE/Gainesville, FL
University of San Antonio Hospital, San Antonio, TX

MARSHALL, JULIA KNAGGS/Granger, IN
Shands Hospital, Gainesville, FL

MEARES, MICHAEL JAMES/Miami, FL
Tallahassee Memorial Regional Hospital, Tallahassee, FL

MEDLOCK, MICHAEL DEAN/Orlando, FL
Baylor College Affiliated Hospitals, Houston, TX

MEYER, MARJORIE CLARE/Jacksonville, FL
George Washington University Hospital, Washington, DC

MICOLUCCI, VICTOR CHARLES/Gainesville, FL
University Hospital, Jacksonville, FL

MILES, STEVEN GERHARD/St. Augustine, FL
Shands Hospital, Gainesville, FL

MITCHELL, CORDELL/Hahira, GA
Medical Center of Central Georgia, Macon, GA

NUREDINI, RAYMOND FELIX/Palm Bay, FL
Medical Center of South Carolina, Charleston, SC

PACKER, DAVID LYNN/Gainesville, FL
Albany Medical Center, Albany, NY

PARRILLO, JAN CARL/Deland, FL
University Hospital, Jacksonville, FL

PHILLIPS, WILLIAM GARY/Miami, FL
Halifax Hospital, Daytona Beach, FL

RANDOLPH, BRUCE WENDELL/Live Oak, FL
Area Health Education, Fort Smith, AK

RODDENBERRY, JOHN DOUGLAS/Jacksonville, FL
Ochsner Foundation, New Orleans, LA

RODRIGUEZ, ARSENIO RALPH/Gainesville, FL
University of San Antonio Hospital, San Antonio, TX

ROGERS, JAMES HENRY/Tampa, FL
Shands Hospital, Gainesville, FL

ROLFE, ALAN ELLIS/Jacksonville, FL
Naval Regional Medical Center, San Diego, CA

SAMUELS, VICTORIA RENE/Tampa, FL
Shands Hospital, Gainesville, FL

SANCHEZ, JUAN ANTONIO/Hialeah, FL
Georgetown University Hospital, Washington, DC

SCHROEDER, CAROLYN MARY/Tampa, FL
University of Kentucky Hospital, Lexington, KY

SEITZ, THOMAS LEE/Boca Raton, FL
Shands Hospital, Gainesville, FL

SHAFFER, BENJAMIN SCOTT/Hollywood, FL
Mount Sinai Hospital, New York, NY
SIMO, FRANK/Hialeah, FL
St. Louis University Affiliated Hospitals, MO
SMALLWOOD, CHARLES ALLAN/Panama City, FL
Baptist Memorial Hospital, Memphis, TN
SMALLWOOD, KRISTIN WIDICK/Cocoa Beach, FL
Baptist Memorial Hospital, Memphis, TN
STAAB, JAMES ALBERT/Nokomis, FL
Thomas Jefferson University Hospital, Philadelphia, PA
TANNER-ST. JAMES, CAROL/Hazelhurst, MS
Alachua Hospital, Gainesville, FL
TOLEDO, CHARLES HUMBERTO/Tampa, FL
North Carolina Memorial Hospital, Chapel Hill, NC
TROTTI, ANDREA III/Clearwater, FL
Shands Hospital, Gainesville, FL
WAGNER, MARK STEPHEN/Pensacola, FL
Rhode Island Hospital, Providence, RI
WAHL, DAVID ALAN/Boulder, CO
Medical College of Virginia, Richmond, VA
WEAVER, CASEY TODD/Gainesville, FL
Barnes Hospital, St. Louis, MO
WENNER, KARL CONRAD/Lakeland, FL
Shands Hospital, Gainesville, FL
WILLIAMS, EDWARDO D'ANDRE/Tallahassee, FL
Fayetteville Area Health Center, Fayetteville, NC
WOODEN, WILLIAM ARTHUR/Sanford, FL
Grady Memorial Hospital, Atlanta, GA
YANCEY, JUDITH MERRILL/St. Petersburg, FL
Shands Hospital, Gainesville, FL
YANCEY, WALTER BRUCE, JR./Clearwater, FL
Shands Hospital, Gainesville, FL
YOUSE, DON C., JR./Sarasota, FL
Lynchburg Family Practice, Lynchburg, VA
ZAHNER, LYNN ROSS/Lincolnwood, IL
Tulane University Hospital, New Orleans, LA
ZIEGLER, JAMES WILLIAM/Deerfield Beach, FL
University of South Florida Hospital, Tampa, FL
ZUCKER, IRA ALAN/North Miami Beach, FL
Grady Memorial Hospital, Atlanta, GA

Class of 1985

ALBRITTON, JOHN SPENCER/Pensacola, FL
AMDUR, ROBERT JESS/Miami, FL
ANDERSON, DOUGLAS JEFFERSON/Ft. Lauderdale, FL
BAILEY, STEVEN MORRELL/Altha, FL
BARNHART, JANICE MARIE/New York, NY
BENTON, THOMAS BARTBERGER/Panama City, FL
BITTNER, ANNA KATHRYN/Orlando, FL
BLACKWELDER, AARON KENT/Apopka, FL
BRANT, STEVEN ROSS/N. Miami Beach, FL
BRODSKY, HAL MARC/Pembroke Pines, FL
BROWN, ROBERT ALLEN/Orlando, FL
BRYAR, BETSY ANN/Geneseo, NY
CAMPBELL, WALTER LEE, JR./Panama City, FL
CHEN, AVIS SHIRLEY/Gainesville, FL
CUMMINGS, STEVEN PAUL/Tallahassee, FL
DI GAETANO, MARGARET D./Port Orange, FL
DILLINGHAM, ROBERT CARTER/Tallahassee, FL
DIXON, ANDREW ALEXANDER/Lake Wales, FL
DOLSON, DAVID JAMES/Miami, FL
DRAPER, JOSEPH WILLIAM/Tallahassee, FL
DUKE, JAMES BRADFORD/Belleair, FL
EDWARDS, JOHN RANDALL/Lakeland, FL
EMERY, MARJORIE MASON/Jacksonville, FL
ENRIQUEZ, SONIA REGINA/Miami, FL
FAHEY, SHERA ANN ALFORD/Tallahassee, FL
FELMAN, ROBERT HOWARD/Gainesville, FL
FIELDS, ROBERT CARLTON/Tampa, FL
FLETCHER, MICHAEL THOMAS/Thomasville, GA
FRANCIS, ELIE MICHEL/Miami, FL
GOLDMAN, RICHARD ALAN/North Hills, NY
GREER, RICHARD ALDEN/Gainesville, FL
GRUNSTRA, BERNARD PAUL/Ft. Lauderdale, FL
HAMPTON, MARTA CECILIA/Lake Wales, FL
HANKINS, MICHAEL WAYNE/Carol City, FL
HARRIS, KAREN ELOISE/Jacksonville, FL
HELFMAN, MELANIE SHERRY/N. Miami Beach, FL
HIGGINS, PHILLIP ARTHUR/Palm Beach, FL
HUANG, DAVID YINKAI/Plant City, FL
JOHNSON, JOHN OLIVER/West Palm Beach, FL
JOHNSTON, MATTHEW MURRAY/Tallahassee, FL
KAYALEH, OMAR ROGER/Amman, Jordan
KERENSKY, RICHARD ALAN/Boca Raton, FL
KHOUZAM, NAYER NAGUI/Winter Garden, FL
KOVAZ, BLAISE MATTHEW/Ft. Lauderdale, FL
KROP, DANIEL STEVEN/Miami Beach, FL
KRUEGER, KRISTINE JOY/Ellsworth AFB, SD
KUMJIAN, DANA ARSHAG/Gainesville, FL
LAMBERT, LORI KATHRYN/Panama City, FL
LANIER, LINDA/Jacksonville, FL
LARRISON, WAYNE IAN/Miami, FL
LEW, DAVID CHULHEE/St. Petersburg, FL
LICHTENSTEIN, JERRI LYNN/Maitland, FL
LUBNIEWSKI, ANTHONY JOSEPH/Ozone Park, NY

McCLELLAN, DANIEL LEE/Satellite Beach, FL
McCOLLOUGH, WILLIAM MARK/Gainesville, FL
MADJAR, DAVID DOUGLAS, JR./Holiday, FL
MEADE, ROBERT LAWTON, JR./St. Augustine, FL
MICHELS, MARK/Belleair Beach, FL
MILLAN, SUSAN BONKEMEYER/Gulfshores, AL
MILLAN, TERANCE FRANCIS/Jacksonville, FL
MILLER, KEITH LAURENCE/Miami, FL
MOELLER, DEREK KEITH/Oldsmar, FL
MUELLER, PAULA DAWN/Merritt Island, FL
MURRAY, PAUL MICHAEL/Plantation, FL
NADITZ, KENNETH JAY/Merritt Island, FL
NARDANDREA, JOHN PAUL/Ormond Beach, FL
NESMITH, RICHARD LEE/Gainesville, FL
NIX, DAVID SYDNEY/Waynesboro, VA
NOWICKI, MICHAEL JAMES/Jacksonville, FL
OLIVER, BRIAN CHARLES/Chelmsford, MA
OLSON, JEFFREY JOHN/Tampa, FL
PALMER, SAMUEL ELIJAH/Ft. Pierce, FL
PARDO, RUBE JOSE/Coral Gables, FL
PALAEZ, ANNETTE KAREN/Tampa, FL
PENNICK, WILLIE ALEXANDER/Quincy, FL
PERRY, ANN ELIZABETH/St. Petersburg, FL
PETERSON, COBERN VAN, JR./West Grove, PA
PHAM, CHRISTINE THIEN-NGA/Orlando, FL
POSTMA, MICHAEL PETER/Marianna, FL
POWELL, GEORGE EDWARD/Naples, FL
PRICE, BILLY RAY, II/Pensacola, FL
PUPO, RAFAEL/N. Miami, FL
QUINN, SUZANNE LORRAINE/Stony Brook, NY
RAFANELLI, ROSALIND RAMI/Rockledge, FL
REICHERT, RICHARD WILLIAM/Lake Worth, FL
RHOTON, ERIC LOREN/Gainesville, FL
RIDDELL, KIM MINARD/Rapid City, SD
ROBLES, HARVEY BRADFORD/Lighthouse Point, FL
ROSEBROUGH, CARL WYCLIFFE, JR./Orange Park, FL
SCARBOROUGH, MARK THOMAS/Gainesville, FL
SCHMITT, CATHLEEN ELIZABETH/Clearwater, FL
SMALL, PETER McMICHAEL/Gainesville, FL
SMITH, DAVID THORNTON, JR./Gainesville, FL
SMITH, JOE FRANK/Marianna, FL
SMITH, STEPHEN GREGORY/Panama City, FL
SNOWBALL, HALINA MARIA/Gainesville, FL
SOLLACCIO, ROBERT JAMES/Hollywood, FL
SOWERS, CYNTHIA SUZANNE/Tequesta, FL
STEARNS, PAMELA TALAN/Miami, FL
SWAILS, JAMES RYAN/Franklin Springs, GA
TAGERT, BERT EDWIN/St. Augustine, FL
TAYLOR, TIMOTHY ROYAL/Enstis, FL
TROYER, PHILIP DEAN/Bronson, MI
UHL, MARK/Sacramento, CA
ULSETH, ROBERT N./W. Palm Beach, FL
VAN PEURSEM, TAMRA LYN/Lake Worth, FL
WAGNER, DEBRA ANN/Norridge, IL
WALLEN, NEIL DIMITRI/Miami, FL
WASSENAAR, JOHN WILLIAM/Seminole, FL
WEBB, ELDON LEROY, JR./Lexington, KY
WEBER, DAVID RYAN/Louisville, KY
WELLSMITH, NANCY VERNE/Orlando, FL
WESTWICK, THOMAS JAMES/Niceville, FL
WILLIAMS, CLAYTON RONALD/Harleysville, PA
WOODY, JOHN DAVID/Hollywood, FL
WOODY, RONALD HARLAN, III/Hollywood, FL

Class of 1986

ANZALONE, SALVATORE/Dunnellon, FL
APPELL, SCOTT VICTOR/Jacksonville, FL
BAIR, MARY CLARE/Palm Beach Gardens, FL
BARON, TODD HUNTLEY/Austin, TX
BELTRAN, ROSA HELENA/Quito, Ecuador, SA
BROWN, ADRIAN/Rio de Janeiro, Brazil, SA
BROWN, ALMA JOYCE/Quincy, FL
CADDICK, WILLIAM JAMES/Silver Springs, FL
CAMPBELL, DAVID ALLEN/Omaha, NE
CARTWRIGHT, JAMES DANIEL/Cantonment, FL
CHOPIK, JOAN DIANE/Port Charlotte, FL
CLARK, CLIFFORD PRAY, III/Miami, FL
COLE, TERRY LINN/Jacksonville, FL
COY, KEVIN MICHAEL/Winter Springs, FL
CRAIG, DEBORAH LEE/Tampa, FL
DECI, PAUL ANDREW/Jensen Beach, FL
DeLACURE, MARK DENNIS/Gainesville, FL
DIEHL, MICHAEL JOHN/Tampa, FL
DORTA-DUQUE, MARIA LUISA/Miami, FL
ELDER, MELISSA ELLEN/Tampa, FL
ELLISON, DENNARD WILLIAM/Jacksonville, FL
EMMANUEL, PATRICIA JACQUES/Spring Lake, NJ
ENNEKING, FRANCESCA KAYSER/Melrose, FL
FAGIEN, MICHAEL/Boynton Beach, FL
FLANAGAN, ALAN DEAN/Gainesville, FL
FLORENCE, KENNETH SPENCER/Miami, FL

GAINES, RICHARD KENNETH/Ormond Beach, FL
GILLEON, SPENCER ELWOOD/Aurora, CO
GIORDANO, ANTHONY JOSEPH/Jacksonville, FL
GLOWASKY, ANN LOUENE/Pensacola, FL
GORE, JAMES ROY, JR./Griffin, GA
GREENBERG, BRIAN KEITH/Altamonte Springs, FL
GRIMM, KARYN LEE/Ft. Lauderdale, FL
GRINENKO, DAWN MARIE/Dover, FL
GYARMATHY, RAYMOND HOWARD/Seminole, FL
HANKS, WILLIAM JOSEPH/Pensacola, FL
HARRIS, BRIAN ARLEY/Ft. Myers, FL
HARVILLE, TERRY ODELL/Groveland, FL
HOWARD, ESTRELLITA LOUISE/Tallahassee, FL
HUMPHREYS, RANDALL FRIAR/Panama City, FL
ISTORICO, LISA JEANNE/Sarasota, FL
JAGGEARS, FLOYD RICHARD, JR./Tallahassee, FL
JAMES, HERMAN GERLACH, III/Tallahassee, FL
JOHNSON, BILLY CLINTON/Alachua, FL
JOLKOVSKY, RICHARD/Seminole, FL
JORDAN, JAMES RANDALL/Gulf Breeze, FL
JOSEPH, DANIEL MARK/Plantation, FL
KEIGER, CHRISTINA MARIE/Sarasota, FL
KIRCHGESSNER, KIM FRANCES/Cocoa Beach, FL
KOWALSKE, KAREN JEAN/Melbourne, FL
LEE, MARVIN, III/Tampa, FL
LEPTRONE, DEBRA MARIE/Clearwater, FL
LOGAS, PAUL CHRIS/Mount Dora, FL
LORENZEN, TIMOTHY ROBERT/Winter Park, FL
LYON, JOHN RICHARD, II/Cocoa, FL
McCORMICK, MICHAEL HAROLD/Panama City, FL
MAAS, COREY STUART/Clearwater, FL
MACKAY, EDWARD GEORGE/Delray Beach, FL
MARTIN, CAROL LYNN/New Orleans, LA
MASTIN, SUZANNE TIRALLA/Milford, NH
MEISEL, DEAN RONALD/Cape Coral, FL
MILLION, LYNN/Gainesville, FL
MIXSON, ROBERT DAVID/Coral Gables, FL
MOORE, GLORIA LOVON/Kenansville, NC
MORGAN, GLEN ANDREW/Cocoa Beach, FL
MORGAN, RUTH SUZANNE/Youngstown, FL
MOSIER, DENNIS RAMON/Brooksville, FL
NEWMAN, FREDERIC BRAD/San Rafael, CA
NGUYEN, LOI PHI/Gainesville, FL
OGBURN, JOSEPH ANTHONY/Orlando, FL
PAONESSA, JEFFREY LOUIS/Gulfport, FL
PATTERSON, PATRICIA FAYE/Chattahoochee, FL
POFF, STEPHEN WALTER/Tampa, FL
PRINCE, VICKIE VOGEL/Herndon, FL
REINA, DOMENICK JOSEPH/Tampa, FL
ROBINSON, BRYAN DAVID/Tallahassee, FL
ROMERO, RENE/Tampa, FL
ROOT, JONATHAN DAVID/Tampa, FL
SCOTT, JAMES ARTHUR/Daytona Beach, FL
SEEKINS, DANIEL WARREN/Satellite Beach, FL
SELLINGER, SCOTT BARRETT/Pembroke Pines, FL
SIEGEL, ALAN RICHARD/Miami, FL
SISCO, LANCE THAYER/Tampa, FL
SMITH, GARY MICHAEL/Plantation, FL
SMITH, PETER CHRISTIAN/Dunedin, FL
SMOWTON, JEFFREY STEPHEN/Sarasota, FL
SMOYER, WILLIAM ERNEST/Plantation, FL
SNYDER, DIANE JOY/North Miami Beach, FL
SPRINGER, DONNA JEAN/Ocala, FL
STEADMAN, PAUL RALPH/St. Petersburg, FL
STEWART, DENNIS ALAN/Crestview, FL
ST. JAMES, LUTHER, III/Webster Groves, MO
SWARTZ, DANI/Largo, FL
SWIETNICKI, SUZANNE RAUSCHENPLAT/Stamford, CT
SWITZER, BARBARA ALICE/Lake Worth, FL
TIMMEL, MICHAEL DAVID/Ft. Walton Beach, FL
TRIGGS, WILLIAM JOSEPH/Indialantic, FL
TSAI, CYNTHIA HSIEH-CHI/Plantation, FL
VEGA, HENRY/Miami, FL
VIAMONTE, MANUEL/Miami Beach, FL
VO, PHUC/Gainesville, FL
WALKER, TIMOTHY WOODFIN/Tallahassee, FL
WALLER, JAMES DAVID/Marianna, FL
WARREN, SCOTT DAVID/Titusville, FL
WEARE, JOHN LAWRENCE, JR./Indian Harbour Beach, FL
WEINSTEIN, TODD STEVEN/Edinboro, PA
WELCH, DAVID EUGENE/Winter Park, FL
WELLS, NATALIE CLARKE/Orlando, FL
WEST, DANIEL CHARLES/Bradenton, FL
WESTBURY, MICHAEL JOHN/Atlantic Beach, FL
WILLIS, CARTER PRATT/Homestead, FL
WOOLSEY, DAVID DEAN/Ft. Lauderdale, FL
WORSOWICZ, GREGORY MICHAEL/Jacksonville, FL
WYATT, MARK STEVEN/Sneads, FL
WYROSDICK, CLIFTON CRAIG/Milton, FL
YARNALL, KIMBERLY HAWBLITZEL/Bradenton, FL
ZANDER, ERIK HENRY/Seminole, FL

Class of 1987

AGOCS, MARY MARGARET/Sarasota, FL
ALMOND, PATRICK STEPHEN/Merritt Island, FL
BALCH, MIMI ANN/Miami, FL
BAUMGARTL, WILLIAM HANS/Pinellas Park, FL
BELL, ELIJAH JAMES/West Palm Beach, FL
BENNETT, RICK LEE/Jacksonville, FL
BERENFELD, SHARON ANN/Miami, FL
BIANCHI, ANN MARIA/Jacksonville, FL
BINGHAM, HERBERT LOCKE/Neptune Beach, FL
BLACKWELL, SAMUEL DWIGHT/Chiefland, FL
BURKE, FLOYD WHITLOW/South Ponte Vedra Beach, FL
CARTER, TIMOTHY DAVIS/Jacksonville, FL
CONTI, JAMIE BETH/Gainesville, FL
CUFFE, MARK JAMES/Brooksville, FL
CULLEN, MARY KAREN/Gainesville, FL
CURRY, SHEILA DENISE/Edison, NJ
DAMIANI, JAMES TIMOTHY/Clearwater, FL
DIAMOND, KELLY ANN/Middleburgh, NY
DIAZ, NILS MARCOS/Gainesville, FL
DINERMAN, JAY LAWRENCE/Coral Springs, FL
DINSMORE, PATRICIA LOUISE/Eau Gallie, FL
DOLAN, PATTI ANNE/Tampa, FL
DONAHOE, NANCY ANNE/Orlando, FL
DOYLE, JAMES WILLIAM/Rockledge, FL
DUNLEVY, SUSAN DANIELSEN/Springfield, MO
DURY, PATRICIA JEAN/Clearwater, FL
ENGWALL, SCOTT ALAN/St. Petersburg, FL
FAHEY, MARK EDWARD/Stenbenville, OH
FEAGEANS, MARY ELIZABETH/Jacksonville, FL
FENICHEL, ADAM SETH/Nashville, TN
FERNANDEZ, HUGO FRANCISCO/Hialeah, FL
FESENMEIER, JAMES THOMAS/Mobile, AL
FLYNN, JOSEPH CHARLES, JR./Orlando, FL
FORESMAN, GARY EDMOND/St. Petersburg, FL
FREEMAN, DEBRA ELAINE/Melrose, FL
GASQUE, JAMES WINFORD/Gresham, SC
GESSNER, BRADFORD DAVID/Gainesville, FL
GRANVILLE, LISA JEANNE/Miami, FL
HADLEY, SUSAN/Maitland, FL
HARDIN, CHERYL LYNETTE/Temple Terrace, FL
HELMUTH, LOREN JAY/Sarasota, FL
HENRY, BRIAN NELSON/St. Petersburg, FL
HESLEP, GRANT DANIEL/Fresno, CA
HOFFLER, ERIC WYCKLIFFE/Titusville, FL
HORTON, DARLENE PATRICIA/Landerhill, FL
HUDSON, RHONDA EUGENIA/Vero Beach, FL
HURLBUT, HOPE PHYLLIS/Lake Worth, FL
IMAMI, EMRAN RIAZ/Port Charlotte, FL
JACKSON, DENISE LYNN/Eldoret, Kenya, East Africa
JAFFE, EDWARD MOSHEIM/Miami, FL
JIMENEZ, CARLOS JOSE/Hialeah, FL
KELLY, MAUREEN ELIZABETH/Arlington, MA
KERR, NATALIE CHRISTINE/West Palm Beach, FL
KOOPERMAN, SCOTT ELLIS/Forest Hills, NY
KOPPANG, JOYCE RENE/Ft. Lauderdale, FL
LEADON, CATHERINE CECELIA/Gainesville, FL
LESTER, JONATHAN PETER/Plantation, FL
LOWREY, GERALD CARLTON/Milton, FL
MARAMARA, LUIS/Cape Coral, FL
McALVANY, WILLIAM PRICE/Sarasota, FL
McCURRY, KENNETH RICKY/Land O' Lakes, FL
MULET, MIGUEL ENRIQUE, JR./Largo, FL
NELSON, DENISE CAROL/Casselberry, FL
NIELSEN, JEFFREY WINTHER/Jacksonville, FL
NOVICK, ALAN KEITH/Miami, FL
O'NEILL, JAMES FRANCIS, JR./Verona, PA
PADRON, MANUEL RICARDO/Miami, FL
PATINO, FRANK/Miami, FL
POWELL, ELISHA THOMAS, IV/Miami, FL
RANDELL, ANDREA LEE/Hollywood, FL
RAO, JAYALAKSHMI KOPPAKA/Gainesville, FL
REAM, THOMAS SCOT/Wheeling, WV
RECCOPPA, LAWRENCE/Secaucus, NJ
RHOTON, ALBERT JOHN/Gainesville, FL
RODGERS, LAWRENCE WILLIAM, JR./Gainesville, FL
SCHECK, DAVID NATHAN/Jacksonville, FL
SCHIERING, MICHAEL ROSS/Ft. Lauderdale, FL
SCHULTZ, SCOTT HERBERT/Oak Park, MN
SHORSTEIN, NEAL HARRIS/Jacksonville, FL
SKAGGS, HAROLD LAVON, JR./St. Petersburg, FL
SKEENS, JOSEPH LESLIE/Orlando, FL
STANLEY, GEORGE ARTHUR/Exton, PA
VAZ, GARTH OLSTEIN/Brooklyn, NY
VON ZABERN, CAROLYN ANN/Tequesta, FL
WARE, MARSHA DIANE/St. Petersburg, FL
WEITZEN, JANET/Gainesville, FL
WILLIAMSON, KELLI GWYN/Forest City, FL
YOUNG, EDWARD DANIEL/Windermere, FL

GRADUATE STUDENTS

Name/Hometown

Anatomy

BEGOVAC, PAUL C./Phoenix, AZ
DWORETZKY, STEVEN I./Saratoga Springs, NY
GALALEO, DENI SCOTT/Meadville, PA
LAI, CHAR-HUEI/Taipei, China
SHIH, JING-CHIOU/Kaohsiung, China

Biochemistry & Molecular Biology

ACUNA, MERCEDES L./Cumana, Venezuela
BAUMBACH, GEORGE A./Bayshore, NY
BAUMBACH, LISA L./Hollywood, FL
BRADLEY, JANICE L./Canyon, TX
BRAUN, KIMBERLY S./Lakeland, FL
CARTER, JOHN MARK/Rockledge, FL
CHEN, ZONG/Bijing, China
CHILES, THOMAS CRANE/Jacksonville, FL
DU MEE, CHARLES P./Blackburg, VA
ELLER, MARK S./Granite Quarry, NC
ELLMER, LAWRENCE/Leesburg, FL
FREUND, ERWIN/Driebergen, Holland
LAINE, RONEY O./Mason City, IA
MARRIOTT, DAVID B./Montreal, Quebec, Canada
MICHAELS, GEORGE S./Philadelphia, PA
PIETROMONACO, SAL/Montreal, Quebec, Canada
RODRIGUEZ, INGRID M./Rio Piedras, PR
SCHENERMAN, MARK A./Baltimore, MD
SCHIEBER, GRETCHEN L./Winter Park, FL
SMITH, KIRK E./Portland, OR
TANHAUSER, SUSAN M./Arlington, VA
WEISSBACH, LAWRENCE/Cedar Grove, NJ

Immunology & Medical Microbiology

ANDERSON, KEITH/Lorain, OH
BOHENZKY, ROY A./Daytona Beach, FL
FAULMANN, ERVIN L./Bozeman, MT
FLICK, DAVID/Indian Rocks Beach, FL
GOTTLIEB, H. JONATHAN/Albany, NY
HERMONAT, PAUL L./Durham, NH
HINES, MELISSA G./West Field Center, OH
HORWITZ, RANDY J./Skokie, IL
KMIEC, ERIC B./Ware, MA
KROEGER, PAUL E./Winston-Salem, NC
LABOW, MARK A./Gainesville, FL
LITHERLAND, SALLY ANN/Satellite Beach, FL
MacKAY, SALLY L./New Zealand
MASTERS, BRIAN S./Gainesville, FL
McCARTY, DOUGLAS M./Norton, VA
McLAUGHLIN, SUSAN K./Santa Fe, NM
MERCHANT, MARY A./Madison, FL
OBERSTE, MARK S./Fair Oaks, CA
PLACE, DEBORAH A./Decatur, GA
PROKOPP, KEITH M./Detroit, MI
REIS, KATHLEEN J./Largo, FL
SIEGEL, MICHAEL L./Ithaca, NY
THOMPSON, JAMES P./Jacksonville, FL
TOBIN, GREGORY JOHN/Charlottesville, VA
TUMWASORN, SOMYING/Bangkok, Thialand
WRIGHT, RICHARD M./Indianapolis, IN
YARNALL, DAVID P./Niceville, FL
YARNALL, MICHELE S./Orefield, PA
ZAMBETTI, GERALD PAUL/Marietta, GA

Neuroscience

COHEN, RICHARD H./Youngstown, OH
DENSMORE, CHARLES L./Huntsville, AL
EMADIAN, SEYED M./Iran-Sari, Iran
FOEHRING, ROBERT C./St. Albans, NY
HUNTER, GALE D./St. Louis, MO
JAKEMAN, LYN BURRELL/Rexford, NY
KING, MICHAEL A./Lowell, MA
LEE, DAVID TIMOTHY/Westbury, NY
RUTH, NANCY JEANNE/Baltimore, MD
SEMPLE-ROWLAND, SUSAN L./Wichita, KS
SPIROU, GEORGE A./Indianapolis, IN
WAYNE, DENISE B./Livingston, NJ
WIRSIG, CELESTE R./Philadelphia, PA
YATES, BILLY JOE/Gainesville, FL
YEOMANS, DAVID C./Rochester, NY
ZIDANIC, MICHAEL/Pittsburg, PA

Pathology

BECKWITH, DAWN M./New Smyrna Beach, FL
BEVIS, CYNTHIA C./Pontiac, MI
COLE, CYNTHIA ANN/St. Petersburg, FL
COOK, DANIEL J./Scituate, MS

DUGGER, DONALD RAY Deland, FL
HAYES, MARK P./Winston-Salem, NC
HENSON, VICTORIA L. K./Shamrock, FL
HOUCK, HERBERT J./Gainesville, FL
LaFACE, DRAKE M./Altamonte Springs, FL
LU, CHENG-CHAN Taipei, China
MACKAY, ROBERT J./New Zealand
McCONNELL, THOMAS J./Miami, FL
MLADINICH, CHRISTOPHER R./Miami, FL
OBA, DOUGLAS EARL/St. Mary's, AK
RIVERA, DELIA R./Tegucigalpa, Honduras
ROBBINS, VICTOR W./Crossett, AR
SHAH, VIRENDRA O./Stanford, CT
SHAUT, DAVID M./Delaware, OH
TARNUZZER, ROY W./Orlando, FL
WECHSLER, SALLY J./Bethesda, MD
XIANG, JIAN-HUA/Shan, China

Pharmacology & Therapeutics

BORTELL, RITA BELLIS/Micanopy, FL
BOTTIGLIERI, DENISE F./Hawthorne, NY
FERRERO, JAMES L./Gary, IN
HEIMAN, ANN S./Menasha, WI
KARARLI, TUGRUL/Ankara, Turkey
LAMBERT, SCOTT M./Kenosha, WI
McARDLE, SHARI/West Hamptom, NY
NELSON, CAROL A./Acton, MA
PAYZA, KEMAL/Bronx, NY
RAULLI, ROBERT EMIL/Albany, NY
SCOTT, JAMES A./Daytona Beach, FL

Physiology

BATTLES, AUGUST HENRY/Branch, WI
BOYD, FREDERICK T./Gainesville, FL
CASTO, RODNEY L./Orlando, FL
LEWIS, ROBERT E./Iowa City, IA
NIEDERREITHER, KAREN A./Osceola, FL
PACITTI, ANTHONY J./Waltham, MA
STEINER, MARTIN/Clemson, SC
SUMNERS, ELAINE M./Hampshire, England
TOD, MARY LEE/Lake Jackson, TX
VanDEUSEN, WAYNE/Gainesville, FL
WILSON, KAREN M./Raleigh, NC
WOZNIAK, JOHN ALEX/Gainesville, FL
YOUNG, NINA M./Pittsburg, PA

This public document was promulgated at an annual cost of $14,102 or $3.53 per copy to counsel and inform prospective medical students and others interested in the educational programs of the University of Florida College of Medicine.